

Ecological Services

Fiscal Year 1999 Annual Report Region 3



*Region 3 has the National lead
for a proposal to delist
the Bald Eagle*

- USFWS Photo by Sue Matthews

Program Description and Mission

The Ecological Services Mission is to ensure healthy fish and wildlife populations and the health of their environments. This mission is accomplished by protecting and conserving migratory birds, endangered species, and their ecosystems. The following programs carry out the Ecological Services mission.

The **Habitat Conservation Program** within Ecological Services helps other federal agencies plan projects (e.g., roads, flood control projects, navigation projects) to avoid or minimize harm to fish, wildlife, and their habitats. This Program helps implement the Clean Water Act by reviewing projects that may affect wetlands and then provides assistance in the design of projects to avoid impacts to fish and wildlife. The Habitat Conservation Program also ensures fish and wildlife impacts are considered and addressed when Federal power projects are licensed or relicensed, so that fish and wildlife benefits to people are not lost.

The **Endangered Species Program** within Ecological Services identifies species that are or could become endangered and protects them under the Endangered Species Act. This Program then works to recover these rare and declining species. The Endangered Species Program also works to prevent the need to add species to the list by working with government and private partners to find ways to conserve species of concern.

The **Environmental Contaminants Program** within Ecological Services works with partners to prevent contamination and maintain healthy ecosystems for fish and wildlife. Service biologists in this Program identify contamination that adversely affects the health of fish, wildlife and their ecosystems. As a federal trustee, the Service negotiates settlements from polluters to restore areas affected by contaminants so that they once again support fish and wildlife and the associated benefits to local citizens.

The **Private Lands Program** within Ecological Services gives private landowners financial and technical assistance in restoring wetlands, prairies, woodlands, and other areas on their land. This program guides wetland and natural area restoration efforts on private lands to achieve multiple benefits, such as floodwater storage, water quality improvement, or migratory bird conservation. The Private Lands Program also builds partnerships with other agencies, organizations, and corporations to pool resources needed to assist landowners in restoration projects.

Summary of FY 1999 Accomplishments

Endangered Species

American Bald Eagle

A milestone for endangered species conservation was reached this year and it was led by Region 3. On July 3, 1999, President Clinton announced that the Service was proposing to take the bald eagle off the list of threatened and endangered species. That announcement happened only after years of work by many people and groups, including the Bald Eagle Recovery Team which was lead by Jody Millar in the Rock Island Illinois Field Office. An extremely successful outreach effort for the proposal was coordinated through a team led by Joan Guilfoyle. The proposal was a news story on all the major network's morning shows and nightly news shows as well as in the newspapers across the country. Also, the bald eagle pages on the Service's website made information on the eagle and the proposal instantly available to the public and media. Jody and Joan are continuing to lead their teams through the proposal and decision making process period

Gray Wolf

Gray wolves continued their recovery progress in 1999. We hoped to propose nationwide changes to the status of the gray wolf. Unfortunately, the Minnesota state Legislature failed to pass a wolf management plan and that left the future of the wolf in Minnesota unknown and unpredictable. Ron Refsnider rewrote the proposal to address this change and that proposal is now under review in the Washington Office. Additionally, personnel from this Region continued outreach on the gray wolf by answering numerous requests for information, updating existing fact sheets, creating new fact sheets, maintaining information on the gray wolf on the Website, and compiling and distributing two issues of "Wolf Tracks" a Regional publication containing current information on wolf issues. Regional and field office staff continued meeting with and/or communicating with State, Tribal, and non-governmental partners and interested parties about gray wolf issues and the upcoming proposal to change its status.

Karner Blue Butterfly

Another milestone in endangered species conservation was also reached in Region 3 with final approval of Wisconsin's statewide Habitat Conservation Plan for the Karner blue butterfly. "This is the first comprehensive statewide Habitat Conservation Plan and the most inclusive agreement of its kind in the country," Babbitt said at a signing ceremony at Sandhill Wildlife Area in Babcock, Wisconsin.



Secretary of the Interior Bruce Babbitt looks on as Region 3 Director Bill Hartwig and Wisconsin DNR Secretary George Meyers sign the Wisconsin Karner Blue Butterfly Habitat Conservation Plan
- USFWS Photo by John Christian

The Karner blue butterfly Habitat Conservation Plan was developed by the Wisconsin Department of Natural Resources and the Service in conjunction with a group of 26 private and public partners, including county and industrial forest owners, utility companies, three state agencies, conservation organizations, and private landowners. "Most HCPs involve localized areas with only one or a few partners," said Babbitt. "What is unique about Wisconsin's HCP is that it is statewide in scope and involves 26 partners working across an extensive landscape. These partners represent most of the significant private and public landowners within the Wisconsin range of the Karner blue butterfly and a number of interest groups without property or other assets at stake."

Many other rare species require similar habitat to the Karner blue butterfly and will benefit from the conservation efforts taken under the HCP. These include animals such as the Kirtland's warbler, slender glass lizard, eastern massasauga rattlesnake, and wood turtle and plants such as the regal fritillary, yellow gentian, and Hill's thistle.

In addition to working on such highly visible species as the bald eagle and gray wolf, Region 3 personnel also worked on the final listing of the Lake Erie water snake, the proposals to list the Canada lynx and scaleshell mussel, and elevation of the massasauga to candidate status. A conservation strategy for the massasauga was developed and Field Offices have started implementing measures in the strategy. With good planning and action we hope to stop the decline of the eastern massasauga and improve its health range wide.

Region 3 states received \$398,000 in Section 6 funds were distributed to the states in Region 3 for priority actions that included status surveys of species that appeared to be declining and recovery actions for listed species. Targeted species included two endangered birds, one endangered fish, two endangered butterflies, several endangered mussels (including other freshwater unionid species), and six threatened and one special concern plants.

Recovery Plans Recovery Plans for the eastern prairie fringed orchid was completed. Region 3 biologists are working on Recovery Plans for the Piping plover (Great Lakes population), Hine's emerald dragonfly, Karner blue butterfly, Meads milkweed, Illinois cave amphipod, and Pitcher's thistle. Revisions of existing plans for the Higgins eye pearlymussel, Indiana bat, running buffalo clover are ongoing.

The Endangered Species program, with help from other Region 3 Service programs, conducts many activities over the course of a year to conserve listed species. Generally, the work is a result of many small projects scattered over the range of the species. Each small project may not recover the species on its own, but becomes significant when combined with all the other the actions taken to protect a species. These projects ranged from surveys and planning to habitat restoration, across the Region for the following species: Indiana bat, Kirtland's warbler, piping plover, pallid sturgeon, Topeka shiner, Hine's emerald dragonfly, Karner blue butterfly, Higgins' eye pearlymussel, eastern prairie fringed orchid, and western prairie fringed orchid.

Region 3 is particularly proud of the recovery progress we have made for the eastern prairie fringed orchid. A large number of volunteers in Wisconsin and Illinois work for the conservation of this species. Additionally, we are using this orchid as a test case for developing processes for coordinating recovery within and across regions. Louise Clemency, the Endangered Species Coordinator from the Chicago Field, has been identified as the lead for coordinating the recovery program for the eastern prairie fringed orchid. She began identifying processes for ensuring that the highest priority recovery actions are taken first and that research and management are not duplicated and are prioritized appropriately.

Environmental Contaminants Under CERCLA, better known as the Superfund law, the U.S. EPA has authority to clean up contaminated sites with funds generated from polluters. However, they do not have authority to address the natural resources that are harmed or destroyed by contamination. Instead, the law allows Federal, State, and Tribal natural resources agencies, including the U.S. Fish and Wildlife Service on behalf of the Department of the Interior, to act as trustees for natural resources. As trustees for injured natural resources, the Service and other natural resource agencies document the damages, recover damages from polluters for injuries, and then use the money for habitat restoration.



The Service, under the Natural Resources Damage Assessment Program, acts as a Trustee for natural resources damaged by polluters.

-Great Lakes Photo

Region 3 continues to implement the Natural Resource Damage Assessment program on behalf of the Department of the Interior. The Region evaluated several dozen contaminated sites which were being cleaned-up by the U.S. EPA's superfund program. We worked in close coordination with other Department of Interior Bureaus and Native American tribes in all eight states in the region. Together, we assisted EPA in designing cleanups which would be more beneficial to endangered species, migratory birds, and fish, and the habitats which support them. The FWS also achieved legal settlements at several sites which will result in more complete restorations and more productive habitats. One of the larger settlements is discussed below.

Ashtabula River Natural Resources Damage Assessment (NRDA): The Ashtabula River is located in north central Ohio, discharging to the central Basin of Lake Erie. The lower portion of the River and the harbor on Lake Erie have been listed by the US-Canada International Joint Commission as a Great Lakes Area of Concern since the late 1980s as a result of chemically contaminated sediments. In 1994, to avoid expansion of the Fields Brook Super Fund Site (a tributary to the lower Ashtabula) to include the Ashtabula River, local industries joined with U.S. Environmental Protection Agency, Ohio EPA, Ohio Department of Natural Resources and the Service to form the Ashtabula River Partnership. The purpose of the Partnership is to remediate contaminated sediments and restore natural resources in a manner that is consistent with CERCLA, yet is more efficient and cost effective than the formal CERCLA process. Regional Office and Reynoldsburg Ohio Field Office staff have been heavily involved in this effort.

Service contributions have ranged from assisting in planning and conducting sampling efforts, to planning wetland mitigation, to developing ecological justification for US Army Corps of Engineers (Corps) funding at the site. In 1998, the Service and Ohio EPA assisted the Corps in preparing a report on the ecological impairments caused by contaminated sediments and projected ecological improvements that will accrue from remediation (WRDA 312 Report). This report provided the Corps with the necessary justification to exercise their environmental dredging authorities under the Water Resources Development Act (WRDA). Under WRDA, the Corps may act as primary contractor and cost share with local partners on environmental projects. This is the first time the Corps has used this authority that has been available in various forms since 1990. The Service also has a regulatory role under CERCLA as natural resources have been injured due hazardous substances. In this role the Service is leading a coalition of natural resources trustees, including Ohio EPA, Ohio Department of Natural Resources and National Oceanic and Atmospheric Administration to develop restoration projects and negotiate a final settlement of natural resources damage claims against responsible parties at the site.

Fox River and Green Bay Natural Resource Damage Assessment is an ongoing project in Wisconsin. About 125 tons of PCBs have been deposited into the Fox River, with about 40 tons remaining in the sediments. Additionally, every year about 600 pounds of PCBs are scoured from the Fox River sediments and flow to Green Bay. The PCBs were dumped into the river mainly as a result of processes for removing ink and recycling carbonless copy paper.

The lands and water in and around Green Bay and northern Lake Michigan are home to millions of human residents and visitors, an abundance of fish and wildlife, and incredible scenic beauty. Unfortunately, for decades all of the waters of Green Bay and Lake Michigan have exceeded PCB water quality standards for the protection of aquatic life and wildlife. Consumption advisories for dozens of fish and some waterfowl have been in existence for many years, and major commercial fisheries have closed. Also, dozens of fish and wildlife populations have exhibited mortality, deformities, and numerous physiological abnormalities.

To begin addressing the contaminant problems in this area, trustees that included the Fish and Wildlife Service, State of Wisconsin, Oneida Tribe and Menominee Tribe developed a plan to assess PCB contaminant injuries to natural resources. The Service published a notice of the Trustee's Assessment Plan in August, 1996. We intend to finish the Assessment during 1999 and have a report of assessment finalized to coincide with U.S. EPA's decision on cleanup plans for the river.

The Contaminants Program also works with the Endangered Species program to address the needs of these species. Regional Contaminants and Endangered Species staff are in dialogue with the Environmental Protection Agency (EPA) on the adequacy of EPA - Region 5 compliance with the terms and conditions in our Biological Opinion for the Great Lakes Water Quality Initiative (GLI). Our Biological Opinion concluded that the GLI *Guidance* criteria for several bio-accumulating and toxic contaminants would result in the incidental take of bald eagles, peregrine falcons, piping plovers and three listed freshwater mussels. In our Reasonable and Prudent Measures we identified terms and conditions requiring the development and compilation of additional data by EPA to minimize incidental take concerns. EPA has promised to provide a summary of its efforts to-date, along with supporting data, within the next several weeks. The results of this will affect state water quality standards for all states bordering the Great Lakes and it will spill over to affect water quality standards on streams supporting listed mussels.

Habitat Conservation Ecological Services biologists conserve biological diversity by representing natural resources during planning for federal construction actions. The goal of the Federal construction agencies is to build a project (e.g., roads, bridges, levees). The goal of the Fish and Wildlife Service is to minimize the amount of natural resources destroyed or harmed, to ensure that the least harmful option is selected, to ensure that impacts are thoroughly documented, and to ensure that those impacts are mitigated. Not only does this work protect our remaining natural areas, conserve outdoor recreation opportunities, and improve water quality, but a thorough and realistic analysis of project impacts and mitigation costs illustrate the true cost of construction projects versus the benefits supplied. Service biologists work on numerous projects across the Region. The following are brief descriptions of two large projects.

Region 3 Ecological Services biologists are working to conserve the biological diversity of hardwood forests in the **Baraboo Range National Natural Landmark** in south-central Wisconsin. The Baraboo Range is the largest contiguous block of forested land in southern Wisconsin and provides important habitat for migrating and nesting neotropical migrant birds and creates the beautiful southwestern Wisconsin countryside. The integrity of the Landmark is threatened by secondary development from the upgrade of U.S. Highway 12 from Sauk City to Middleton that will make commuting from rural areas of Sauk County to metropolitan Dane County easy. Commuters have to live somewhere, so individual homes, subdivisions, and associated businesses will be built in the Baraboo Range. The Service, along with other federal agencies and state and local agencies and groups, have negotiated over many years. As a result of these efforts, a resolution has now been reached that will provide for protection of the Landmark while allowing for the upgrade of the highway. The Wisconsin Department of Transportation has committed at least \$5 million of transportation funds and up to \$5 million of State Stewardship funds to the mitigation of potential secondary land use impacts through the purchase of lands or conservation easements. Service involvement has helped ensure the protection of the unique resource values of the Baraboo Range.



The proposed listing change of grey wolves in Region 3 continues to be a major issue for the Endangered Species Program staff
- USFWS Photo

In addition to construction projects planned and/or funded by Federal agencies, Service biologists also review certain construction activities that require a federal permit or license. In the last year, Region 3 biologists have commented on two proposals for the construction of large natural gas pipelines. One of the pipelines would go from Joliet, Illinois, through part of Indiana, across Michigan, and into Canada. The other pipeline would also start at Joliet and cross parts of Illinois, Indiana, Michigan, Ohio, Pennsylvania, and New Jersey. Most sections of these pipelines would be between 36 and 42 inches in diameter, with construction rights-of-way between 75 and 150 feet in width. The two pipelines would impact several hundred acres of wetlands, result in fragmentation of woodlands, and involve numerous crossings of rivers and streams. The Service has recommended some alignment changes to avoid important resource areas, changes in construction techniques along certain segments to further minimize impacts, and compensatory mitigation to offset unavoidable impacts, particularly in forested wetlands.

In Missouri, the U.S. Army Corps of Engineers is proposing the St. Johns Bayou - New Madrid Floodway Project which will close the last 1,500 foot gap of a frontline levee. Closing the levee will block the last Mississippi River backwater in the state. Also, this flood control project will drain 36,000 acres of wetlands to double crop agriculture. Waterfowl, wading birds, shorebirds, and bald eagles migrate through and nest in these rare backwater wetlands and larval stages of river fishes feed and mature in them. These wetlands also mitigate the affect of upstream floods and improve water quality by filtering runoff. Service biologists in Missouri are working with other Federal agencies and conservation groups to negotiate with the Corps so that project impacts are accurately identified, that project impacts are minimized, and that impacts are sufficiently mitigated. Ironically, this project was authorized in 1986 but never constructed because local sponsors could not afford the local cost share. However, the Water Resources Development Act of 1996 allows USDA funds to be used for a large portion of the local cost share.

Goals for Fiscal Year 2000

Endangered Species Prelisting	<p>Negotiate conservation agreements for the Eastern massasauga.</p> <p>Provide management/oversight for projects that will conserve or lead to the conservation of the Dakota skipper butterfly, a species of concern, and its habitat. The Service has already been petitioned to list the species and committed to apply conservation measures to prevent the need to list in the future.</p> <p>Complete field office status survey and status determination package for the common tern to determine if the common tern should be elevated to candidate status.</p> <p>Continue to compile information on ongoing Henslow's sparrow monitoring and research to facilitate the Service's efforts to conserve this species. Continue to respond to requests for information on this high profile species.</p>
Endangered Species Listing	<p>Complete the ongoing status surveys of the following species: loggerhead shrike, eastern sand darter, spotted darter, longhead darter, hellbender, and glade spurge.</p>
Endangered Species Recovery	<p>Coordinate Service efforts within Region 3 for listing the Canada lynx.</p> <p>List the scaleshell mussel as a federally endangered species.</p> <p>Participate in finalization of revisions to the Indiana bat recovery plan and development of Indiana bat management guidelines.</p> <p>Implement the Karner blue butterfly HCP and Lake Erie watersnake recovery plans.</p> <p>Support the effort to reintroduce a migratory population of whooping cranes with an initial release into central Wisconsin.</p> <p>Complete field office coordination and preparation of the final recovery plan for the Higgins' eye pearl mussel.</p> <p>Continue to aggressively implement new recovery plans focusing on Great Lakes piping plover, Michigan monkeyflower and Houghton's goldenrod, Mitchell's satyr butterfly, Pitcher's thistle, and dwarf lake iris.</p>

Continue our joint effort with the Ohio Department of Wildlife in the three year cooperative agreement to preserve and enhance habitat to ensure the survival of the only known breeding population of the federally endangered purple cat's paw pearly mussel in Killbuck Creek.

Complete revision of the Running Buffalo Clover Recovery Plan.

Complete Interagency Draft of Karner blue butterfly Recovery Plan.

Permits and Habitat Conservation Plans

Complete a HCP for the Indiana bat at the 6-Point interchange at I-70.

Facilitate implementation of a Safe Harbor agreement with NIPSCO for Karner Blue Butterfly in power line rights of way in northern Indiana.

Develop a HCP for the Interior Least Tern at the Cinergy's Gibson Power Generating Plant.

Endangered Species Delisting

Coordinate Service efforts nationwide and within Region 3 for the proposed delisting of the gray wolf.

Coordinate Service efforts nationwide and within Region 3 for the proposed delisting of the bald eagle.

Endangered Species Consultations

Participate in formal Section 7 consultations as the need arises: including Gypsy Moth control, Lower Missouri River, Upper Mississippi River System Navigation Study and for the Indiana bat section 7 guidelines. Coordinate with Geographic Assistant Regional Directors and other Service Regions on multi-regional and national consultations.

Environmental Contaminants

Provide program leadership and technical assistance to Geographic Assistant Regional Directors and field offices to assist in completing contaminants activities such as, implementation of the CAP manual and technical assistance with the CERCLA process at refuges and potential acquisitions, contaminant investigations, and spill response.

Identify contaminant problems by conducting special studies and investigations, (i.e., flex-funding).

Natural Resource Damage Assessments

Continue to pursue natural resource damage assessment opportunities at sites where natural resources have been adversely impacted by releases of hazardous substances and/or discharges of oil.

Manage the Fox River/ Green Bay Damage Assessment and provide support for Northwest Indiana, Ottawa River, Tri-state mining district and Ashtabula River. Provide program leadership through facilitation of claim development for the natural resource damage assessment activity region-wide, focusing on small claim development (i.e. NPL sites and spills).

Develop and implement restoration plans on natural resource damage assessments where settlements have been finalized.

Continue NRDA efforts on Fields Brook and Ashtabula River and Harbor; utilize settlement funds from Shield Alloy to initiate NRDA work elsewhere; continue NRDA activity on the Nease Chemical Site; and continue NRDA work on the Ottawa River.

Continue our involvement in implementation of the Fish Creek NRDA Recovery Plan.

Aggressively implement the Saginaw Bay NRDA Settlement.

Continue evaluation of contaminant impacts to the water quality of Tippecanoe River, including threats to federally endangered mussels.

Provide Technical Assistance to National Wildlife Refuges

Assist refuges in avoiding, minimizing, and mitigating impacts from federal and other projects, as requested.

Coordinate Region 3's preacquisition contaminant survey activities.

Coordinate with the Division of Engineering regarding lead-based paint, asbestos, Level II and III surveys, and other potential compliance issues.

Prepare Level II and III Survey guidance for field stations and realty specialists.

Spill Response

Continue active participation in the USCG's effort to prepare Contingency Spill Response Plans.

Habitat Conservation Actively participate in the review of federally licensed, permitted, or funded projects that may adversely impact endangered species, lands of the national wildlife refuge system, or habitats/species that are otherwise determined to be of importance.

Support the establishment of new Refuges including: 1) Whittlesey Creek NWR, 2) Leopold NWR, Darby Creek NWR, Old Timbers NWR (JPG) and the Grand Kankakee NWR.

Federal Energy Regulatory Commission Licensing/Relicensing Actively pursue settlement negotiations regarding the re-licensing of non-Federal (FERC) hydro projects.

Significant effort will be exerted at Buchanan, Bond Falls, Au Train, Cataract, and Thunder Bay Projects, as well as in implementing the Ludington Pumped Storage Plant Settlement Agreement and Consumers Energy Hydro Agreement.

Partners for Fish and Wildlife Complete 150 habitat restoration projects with private landowners and other cooperators, which includes wetland restoration, bottom-land hardwood reforestation, and upland prairie restoration. Coordinate and complete project repairs where necessary. Prepare Challenge Cost-Share and other grant applications to provide additional funding for restoration work and equipment purchase. Coordinate restoration activities, financial accounting, reporting requirements, and other administrative duties for successful grants. Continue field days and promotional efforts where opportunities arise. Continue to work with schools to develop outdoor labs.

Farm Bill Activities Swampbuster Assist USDA agencies with evaluation and modification wetland functional assessment procedure for Swampbuster mitigation and minimal effects requests, and assist with quality control of wetland determinations and Swampbuster appeals and violations.

FSA Inventory Farms Review new inventory farms for Important Resources under the most recent MOA and coordinate maintenance and other needed work on existing FmHA easement properties.

Wetlands Reserve Program Conduct WRP site evaluations and rankings, assist with restoration plans on accepted sites, and coordinate with NRCS on special WRP projects associated with NAWMP projects and other efforts. Identify opportunities to cooperate with NRCS to implement the 10-year WRP in conjunction with Partners for Fish and Wildlife.

State Technical Committee Provide FWS representation on the STC to evaluate Farm Bill programs and develop recommendations on integrating fish and wildlife considerations into new and existing programs.

Farm Bill Activities (continued)

Other Coordinate with NRCS on the development and implementation of the Conservation Reserve Program, Wildlife Habitat Incentives Program, and Environmental Quality Incentives Program, with specific emphasis on the application of ranking criteria and technical assistance with wetland restoration and other habitat development.

Ecosystem Team Support

Upper Mississippi River

Participate in and provide support to the Mississippi River Partnership by:

Participating on the Water Level Management Task Force and other similar work groups on the Upper Mississippi River that deal with water level management issues. Managing water levels on the UMR will improve habitats in backwater areas both on and off national wildlife refuge lands.

Participating in the Upper Mississippi River's Resources Forum, On Site Inspection Team, and national dredging team. Such participation will ensure the consideration of fish and wildlife values in the operation and maintenance of the UMR navigation system.

Participating in the Habitat Needs Assessment for the Upper Mississippi River to identify those things that need to be done on the UMR to improve habitat quantity and quality.

Great Lakes

Restore and protect oak savannah and barrens habitat on lands owned by 15 landowners in Wisconsin to benefit the endangered Karner Blue Butterfly. Assist with implementation of goals in the Statewide Habitat Conservation Plan for the Karner Blue Butterfly.

Utilize field office Partners for Fish and Wildlife monies, Clean Water Action Plan opportunities, and Natural Resources Damage Assessment restoration funds to benefit and supplement ongoing efforts in priority watersheds/ecosystems.

Continue to use Ecological Services tools in a place-based manner on Great Lakes Water Quality Guidance, Lake Superior Binational Program, Lake Michigan LaMP and Mass Balance, Habitat Advisory Board, Detroit River, and International agreements affecting the Great Lakes.

Ohio River Continue efforts on the mainstem Ohio River for the development and testing of indicators of Great River assemblages.

Assess population and distribution information on the crystal darter (the only known population is in a short reach of the Elk River in West Virginia) and recommend to Region 5 that it should pursue designation as a candidate species, if warranted.

Continue to work closely with the Corps of Engineers, State fish and wildlife agencies, and all pertinent Service field offices on the Corps' Ohio River Mainstem Systems Study to ensure that concerns of the Service relative to fish and wildlife resources and associated habitats are fully considered in this effort and associated efforts to authorize a Water Resources Development Act for FY2000.

Conduct a survey of the pallid sturgeon in the unpooled portions of the Lower Ohio River mainstem from Olmstead to Cairo, IL, in cooperation with appropriate Service stations and partners.

Obtain distribution lists by state and county for all Federal and State listed endangered, threatened, and candidate species located within the Ohio River drainage. Put the distribution information obtained in FY99 into a GIS layer by county.

Develop a list of federally listed species of concern which occur within ORVE cave/karst systems.

Tallgrass Prairie Contribute to the Tallgrass Prairie HPA as opportunities arise (e.g., railroad project across southern MN).

Outreach Continue the following programs: Piping Plover outreach; open houses in Lake Superior Binational Program as needed, Public meetings with Lake Michigan Forum, Kirtland's Warbler Festival and seasonal tours, seasonal Piping Plover Patrol, and others.

Conduct Congressional tours featuring accomplishments and ongoing issues.

Conduct public hearings and public meetings for the gray wolf proposed reclassification. Provide information to all field offices, Congress, and media on this and bald eagle issues.

Maintain and further develop endangered species home page on Region 3 website.

Conduct media events and interviews, visits with school and youth groups, talks to community groups and non-governmental organizations (NGOs) as needed.

Fiscal Year 1999 Accomplishments

Service Asks For Re-evaluation of PL 566 Project Over Habitat Concerns

Reynoldsburg Field Office

The Preble County, Ohio, Soil and Water Conservation District applied for a Section 404 permit to construct 13 earthen dams across unnamed tributaries of Four Mile Creek as part of the Four Mile Creek Watershed PL 566 Project. On October 1, 1999, representatives of the State resource agencies and the Service met with the applicant to review the project sites. The Service had several concerns regarding the proposal: whether implementation of the impoundments would provide water quality benefits, impacts to woody riparian habitat, including Indiana bat habitat, and the lack of mitigation for losses of stream habitat. We expressed these concerns in a letter to the U.S. Army Corps of Engineers and asked for a re-evaluation of the project benefits and mitigation of stream (including riparian corridor) and wetland losses. 10/1/98

General Motors, Cities Agree to \$28 Million in Saginaw NRDA

East Lansing Field Office

The East Lansing Field Office, along with co-trustees, negotiated a settlement to address injuries to fish, wildlife, and their habitat as a result of PCBs released by General Motors facilities on the Saginaw River. General Motors and two cities will pay \$28.2 million for dredging contaminated sediment, 1,700 acres of land acquisition, restoration of coastal wetlands

and riparian habitat, enhancement of northern pike habitat, creation/enhancement of three boat launch areas and a nature center, a 20 year recovery monitoring program, and costs incurred by trustees. Partners include: Michigan Department of Environmental Quality; Michigan Attorney General; Saginaw Chippewa Tribe; U.S. Department of Justice, Environmental Enforcement Division; U.S. Department of the Interior - Solicitor. 11/24/98

Section 404 Permit Denial Benefits Wildlife

Reynoldsburg Field Office

In June 1994, an individual applied for a Section 404 permit to construct a dam to create a four-acre impoundment. The project would have impacted over three acres of wetlands (including a fen) and a spring fed cold water stream. The site included several state listed plant species and a very healthy population of amphibians. All commenting agencies requested denial of the permit and a U.S. Army Corps of Engineers denial letter was issued on Nov. 21, 1994. It recently came to our attention that the Ohio Division of Wildlife has stocked this stream with brook trout for the past two years and they intend to keep stocking for at least two more years. Thus, we saved a wetland (fen) as well as a high quality spring fed cold water stream. Partners include: Buffalo District-Army Corps of Engineers, Ohio Environmental Protection Agency, Ohio Division of Wildlife, Ohio Division of Natural Areas and Preserves, Cleveland Museum of Natural History, Landowner

Grazing Project Provides Environmental Benefits

Green Bay Field Office

The Central Wisconsin River Grazers Network completed the first year of a project to implement Management Intensive Grazing on dairy/livestock farms in Central Wisconsin. Grazing plans were prepared for 32 farms, resulting in 1,665 acres of cropland being converted to managed grassland pasture. Some of the benefits of this conversion will be: a 10,000 ton per year reduction in soil loss; a reduction of 2,000 tons of sediment and 24,246 lbs. of phosphorus delivered to area surface waters; a greater than 90 percent drop in pesticide use; and the improvement of grassland bird and other wildlife habitat. 1/1/99

Region's Biologists Focus on Ecosystem Approach at St. Louis Training Forum

Region 3

Approximately 220 biologists attended "Biology and the Ecosystem Approach: Putting the Pieces Together," a training forum for all biologists in Region 3. The four-day forum was held in February in St. Louis, Mo. Forum topics included trust resource overviews, Program overviews, habitat conservation, research, monitoring and data management, population management, adaptive resource management, and challenges facing biologists. Many biologists gave presentations, all focused on the Ecosystem Approach. Partners include: Missouri Department of Conservation, Colorado State University, Iowa State University. 2/12/99

Successful Environmental Toxicology Course

East Lansing Field Office

The Service's National Conservation Training Center with selected Service contaminants specialists, who are also trained instructors, conducted a week long course on the Principles of Environmental Toxicology for other Service contaminants and endangered species personnel and representatives from state agencies, other federal agencies and private industry. The instructors taught the fundamentals of environmental toxicology and chemistry and specific topics on groups of contaminants of most concern for fish and wildlife. Students rated the course as valuable and immediately applicable to their jobs. A waiting list for students was needed as demand for this course has increased as a result of past students' recommendations on the quality and usefulness of this course. 2/26/99

Service Wants Counties and Townships as Piping Plover Partners

East Lansing Field Office

The East Lansing Field Office (ELFO) telephoned and wrote several Michigan counties to discuss the plight of piping plovers on private lands. The ELFO asked for the cooperation of the counties and townships in protecting piping plovers in their area. The ELFO asked that the zoning or building permitting offices of these local governments have building applicants contact the Service to assure piping plovers are protected as part of residential construction projects. The counties and townships contacted were

cooperative and agreed to try the arrangement on a trial basis.

Review of Great Lakes Piping Plover Recovery Plan

East Lansing Field Office

The East Lansing Field Office contracted the University of Minnesota to draft a Revised Great Lakes Piping Plover Recovery Plan. The draft Plan was distributed to the Great Lakes Coordination Group. The Group consists of the partners listed above. The Plan lists actions for each partner to take to increase protection of piping plover and their habitat in the Great Lakes and southern wintering grounds. The Group will provide comments to the East Lansing Field Office in April. The comments will be incorporated as appropriate and then the Revised Plan will be distributed for public comment. Implementation of the tasks in the Revised Plan is ongoing, or will be increased by the release of the plan, thus leading to better protection of the piping plover. 3/8/99

1999 Northeast Wisconsin Teacher's Convention

Green Bay Field Office

Cathy Carnes and Kim Kamke from the Green Bay Field Office participated in the 1999 Northeast Wisconsin Education Association's Teacher's Convention held in Green Bay on March 12, 1999. Over 500 teachers and educators from northeast Wisconsin attended. The Service booth provided over 400 posters and over 150 resource inventories to teachers detailing the educational resources available at the Green Bay Field Office. These materials include study/activity guides,

videos, books and other materials on threatened and endangered species, wetlands, habitat conservation, wildlife and migratory birds. Those teachers who have taken advantage of GBFO's resources have made very positive comments on this outreach effort. 3/12/99

Michigan Land Use Institute and Service Partnership

East Lansing Field Office

Michigan Land Use Institute and the Service have agreed to work together to protect coastal habitats in Michigan. As a start, the Service and the Institute have applied as partners for two grants through the Michigan Great Lakes Protection Fund and the Coastal Habitats. If funded by either grant, the Institute would hold workshops for realtors, local officials, landowners and other interested citizens to teach about protection of coastal habitats—home to three threatened plant species: Pitcher's thistle, Houghton's goldenrod and dwarf lake iris—as well as endangered piping plover. The Institute will work with local governments to try to influence zoning and local ordinances to benefit coastal protection and these species. 3/16/99

Service and Michigan Department of Natural Resources increase Piping Plover Protection

East Lansing Field Office

Piping plover nest or use about four Michigan State Parks. Michigan Department of Natural Resources (MDNR) Wildlife Division will employ two piping plover stewards to protect piping plover from park users

and predators. This will potentially increase protection and productivity of about 40 percent of piping plover nests in Michigan in 1999. MDNR has used Endangered Species Act Section 6 funds from the Service to support a steward at one State Park in the past. This year, through the Great Lakes Ecosystem Team competitive grant proposals, the Service is able to provide funding for a second steward. For the stewards at remote State Parks, the MDNR provides a vehicle and on-site supervision and administration the Service could not easily do from East Lansing. 3/16/99

Education on Contaminants and Restoration

East Lansing Field Office

Dr. Lisa Williams discussed the Natural Resource Damage Assessment (NRDA) and Restoration Program and contaminants issues in ecological restoration for two hours with 15 graduate students and their instructors at Michigan State University. These are students very likely to be involved in restoration in the future. Dr. Williams used the Saginaw NRDA settlement negotiation process as an example of how decisions are made on land acquisition for restoration. She also explained the concept of "attractive nuisance" and emphasized the need to evaluate the presence of contaminants on a site before restoration and determine what their availability and toxicity will be after restoration as the pathways to organisms may change dramatically as a result of the restoration.

3/22/99

Piping Plover Protection in Indiana Dunes

East Lansing Field Office

With the aim of expanding piping plover use of historic nesting areas, the East Lansing Field Office and the Northern Indiana Field Sub-office are establishing a closer working relationship with the National Park Service (NPS) in Indiana Dunes National Lakeshore to help increase protection of piping plover habitat in the only high quality potential nesting areas remaining in Indiana. Following coordination over the winter and a March 17, 1999, field review, the NPS agreed to use recreation management techniques to protect high quality piping plover historic nesting areas in Indiana Dunes National Lakeshore. In addition, within the Lakeshore, the NPS will coordinate volunteers to survey potential beaches for piping plover use during the next several weeks. Piping plover have been sighted within the Lakeshore several times in recent years, but have not stayed to nest. Part of the reason plovers may move on from these historic nesting areas is high human and dog use. With the recreation management the NPS is undertaking, piping plover are more likely to stay to nest within the National Lakeshore. With more nesting areas in use, especially in the southern portion of the Great Lakes, piping plover productivity is likely to increase. 3/17/99

Piping Plover Habitat Protection in Illinois

East Lansing Field Office

With the aim of expanding piping plover use of historic nesting areas, the East Lansing Field Office and the Chicago Field Office are establishing a closer working relationship with the Illinois Department of Natural Resources (IDNR) to help increase protection of piping plover habitat in the only high quality potential nesting areas remaining in Illinois. Following coordination over the winter and a March 18, 1999, field review, the IDNR agreed to use recreation management techniques to protect high quality piping plover historic nesting areas Illinois Beach State Park. In addition, the IDNR will coordinate volunteers to survey potential beaches for piping plover use during the next several weeks. 3/18/99

Stakeholders Help Develop Hine's Emerald Dragonfly Recovery Plan

Chicago Field Office

Staff from the Chicago Field Office met with local stakeholders Mar. 10, 1999, to discuss recovery plans for the Hine's emerald dragonfly. The Service is working with land managers from the Illinois forest preserves, nature preserves and state lands that support the endangered insect. These partners are responsible for implementation of several key recovery tasks. Service staff and attendees refined recovery tasks; then discussed ways to coordinate information flow between researchers and land

managers to coordinate natural area management, and developed plans and commitments for annual monitoring of the Hine's emerald dragonfly populations at these sites. The group also established a team to develop guidelines and site specific recommendations for natural area management of the wet prairies, sedge meadows, and marshes where this species occurs. Partners include: Forest Preserve Districts of Cook, DuPage and Will Counties, Ill., and Illinois Department of Natural Resources. 3/10/99

Green Bay Field Office Receives Taking Wing Award

Green Bay Field Office

The Green Bay Field Office was recently presented with the Forest Service 1998 Taking Wing Award, for its partnership role in the restoration of the Wilson Flowage wetland complex. The Taking Wing Award recognizes Forest Service partnership projects for outstanding wetland habitat improvement work. The award, recently presented at the 1999 North American Wildlife and Natural Resource Conference, was accepted by Regional Director Bill Hartwig on behalf of the Green Bay Field Office. Wilson Flowage, located on the Chequamegon-Nicolet National Forest in northern Wisconsin, consists of two impoundments totaling 266 acres. The project involved reconstruction of failing earthen dams and the installation of water control structures for habitat management capabilities. The completed project provides high quality foraging habitat for

waterfowl, eagles, osprey, and numerous other wildlife species, as well as allowing for the development of a northern pike and pan fishery. 3/27/99

Regional Private Land Coordinators Meeting in Missouri

Columbia Field Office

Region 3 Private Lands staff convened at Bennett Springs State Park, in Laclede County, Missouri, for their annual meeting to discuss current issues related to the Partners for Fish and Wildlife Program, the Farm Bill, and technical assistance with other federal agencies in wetland conservation. The meeting was an opportunity for state's in Region 3 to exchange ideas and discuss innovative partnerships and technologies related to private lands efforts in the Region. It was also an opportunity for Missouri to showcase recent habitat restoration projects in Prairie and stream habitats to benefit federally-listed threatened species, such as the Niangua darter and Mead's milkweed, through partnerships with the Missouri Department of Conservation and local Soil and Water Conservation Districts. These projects emphasize current Partners Program direction into fisheries and upland habitats for the protection of Service trust resources.

Partners include: Missouri Department of Conservation Polk County Soil and Water Conservation District Dallas County Soil and Water Conservation District. 3/30/99

Wisconsin Town Receives Incidental Take Permit for Endangered Butterfly

Ecological Services

The Town of Rome, Wisconsin, received an incidental take permit under Section 10(a)(1)(B) of the Endangered Species Act. The permit authorizes take of the endangered Karner blue butterfly in association with road reconstruction along Badger Avenue, Adams County. The area affected includes approximately 10 acres of potential habitat for the butterfly and was determined to be a low effect Habitat Conservation Plan. The Town will minimize effects on the butterfly and mitigate for the proposed take. The permit is in effect through 2029. 4/30/99.

Wisconsin Statewide HCP Application Received

Regional Office/Ecological Services

After five years of development, the Wisconsin Department of Natural Resources has submitted an application for a statewide incidental take permit covering impacts to the federally endangered Karner blue butterfly. Wisconsin and 25 other partners to the Habitat Conservation Plan developed the HCP, including conservation efforts across the butterfly's range, adaptive management, and significant outreach efforts to conserve and manage lands to benefit the Karner blue butterfly. The HCP's stated goal is no net loss of butterfly habitat over the life of the plan. 4/30/99

Service Participates in Earth Day Celebration

Green Bay Field Office

Green Bay Field Office Staff Biologist, Gary Van Vreede, recently participated in Earth Day celebration activities at an area middle school. The school-wide event was based on the Service's Wildlife About Life! video program. Mr. Van Vreede presented a Program on biodiversity, and how it relates to endangered species and wetlands. Personnel from other area conservation agencies also participated in the event. Students will use the information provided to develop an environmental action plan. Approximately 400 students were in attendance for the event. 4/30/99

Service Participates In Career Day Event.

Green Bay Field Office

Staff Biologist, Gary Van Vreede, participated in a career day event at a local high school April 30, 1999. The event is designed to give students a real life perspective on a variety of career fields in which they may be interested in pursuing. Van Vreede presented a Program on careers within the Service and provided information to help students better prepare for entry into these fields. Students will use the information provided to help them decide on a career field to pursue, and allow them to make more informed and meaningful choices regarding future course selection. Approximately 40 students were in attendance for the event. 4/30/99

Piping Plover Management Discussed at Michigan State University

East Lansing Field Office

The Service presented a slide show and discussion session called Piping Plover: Cooperative Management of an Endangered Species in Michigan as part of the Environmental Issues Seminar. The seminar is taught by Dr. Thomas Coon, Chair of the Fisheries and Wildlife Department of the College of Natural Resources at Michigan State University, and Dr. Patricia Soranno, Assistant Professor there. Students asked good questions about piping plover management and were invited to volunteer in Piping Plover patrols. 4/30/99

Turner Lake Wetland Restoration Dedicated

Chicago Field Office

Illinois Department of Natural Resources Director Brent Manning joined representatives of federal, state, and local governments and private organizations in the dedication of the Turner Lake Wetland Restoration Project at Chain O' Lakes State Park in north-eastern Illinois. The \$148,000 restoration and enhancement of the 162-acre wetland was made possible with funding from the Service and The Conservation Fund's Northeast Illinois Wetland Restoration Account, Ducks Unlimited, Pheasants Forever, the Army Corps of Engineers, and the Openlands Project. Partners include: The Conservation Fund, Ducks Unlimited, Pheasants Forever, the Army Corps of Engineers and Openlands Project. 4/30/99

Successful Migration Count in Boone County, Missouri Yields Record Number of Species

Columbia Field Office

The Boone County, Missouri Migration Count, May 8, 1999, was an overwhelming success. The event once again took state honors for the highest number of species with 183 species recorded, the third highest count ever. Fifty one observers participated. Highlights included Black Rail, Fish Crow, Western Sandpiper, 13 species of waterfowl, 11 species of raptors, 16 species of shorebirds, 7 species of vireos, 29 species of wood warblers, and 13 species of sparrows. Assisting count compiler and coordinator Paul McKenzie was Andy Roberts and volunteer Jordan Pusatori. This count continues to be an event that reaches a diverse audience and is an important tool that heightens Columbia's awareness of the importance of migration habitat utilized by numerous species of birds including Neotropical migrants. Partners include: Columbia Chapter of the National Audubon Society, Audubon Society of Missouri, Missouri Department of Conservation, Missouri Department of Natural Resources; University of Missouri and Partners for Flight. 4/30/99

Nesting Platforms Deployed for Forster's Terns

East Lansing Field Office

Dave Best and Lisa Williams placed 25 floating nesting platforms in cattail beds in Saginaw Bay, Lake Huron,

near Nayanquing Point, April 27, 1999. The platforms have been successfully used in previous years to provide a nesting surface for Forster's terns which normally nest on floating mats of cattails. In years when the Great Lakes have high water levels, natural cattail mats may be very scarce. The terns nesting on the platforms are monitored for reproductive success and growth rates of nestlings, both of which may be adversely affected by exposure to contaminants like PCBs. Dave and Lisa were accompanied on this trip by Dr. Eugene Kenaga and a photographer for the Midland Daily News. 4/30/99

Sewage Spill Monitored for Impacts

East Lansing Field Office

Lisa Williams was notified of a large spill of raw sewage on April 21, 1999, and monitored the spill for impacts to trust resources and the potential for the Service to make a claim for natural resource damages until April 26, 1999. The spill resulted from a break in a sewage main owned by Muskegon County. The county responded quickly and thoroughly to the unexpected break. The pipe was 27 years old and had been expected to last 50 years, but was originally purchased from a company that has since gone bankrupt because of similar failures. The county has now commissioned a major engineering study to determine the feasibility of replacing the entire line at a cost of \$35 to \$50 million. Michigan reported approximately 20 dead fish, primarily carp and suckers, from the urban creek where the

spill first entered the water. Fish kills were not observed in the much larger Muskegon Lake, presumably because of cool temperatures, dilution including rain during the spill event, and the ability of fish to escape to un-impacted areas of the large lake. MDEQ will continue to monitor the biota of Muskegon Lake and consider possible enforcement actions. At this time, the impact of the spill on the Service's trust resources does not appear to merit the expenditure of further pursuing a natural resource damage assessment against Muskegon County, especially since the pipe manufacturer is not a viable party. 4/30/99

Michigan Society of Foresters Learns About ESA

East Lansing Field Office

Mark Hodgkins of the East Lansing Field Office gave a presentation on the Endangered Species Act to the Michigan Society of American Foresters. The talk focused on section 7 consultation for federal projects and HCP's for non-federal projects. About 100 foresters attended the two-day conference representing state, federal, and private foresters. 4/30/99

Dam Study Uses Underwater Video Camera to Monitor Fish Behavior

East Lansing Field Office

Consumers Energy is testing the effectiveness of horizontal bar fish protection screens at its Foote Dam hydro facility. This test consists of paired sampling of a protected turbine intake and an unprotected intake, and comparing fish

passage. Of additional interest to the Service is fish behavior at the screens. The East Lansing Field Office is using Alpena Fishery Resource's Office's high resolution underwater video camera to add a visual dimension to Consumers test. The visual observations of fish interaction with the screens should be very helpful in determining future applications of this protective device at other hydro facilities.

4/30/99

Muskegon County Sewage Spill Monitored for Impacts

East Lansing Field Office

Lisa Williams of the East Lansing Field Office was notified April 21, 1999, of a large spill of raw sewage in Muskegon County, Mich. For five days, Williams monitored the spill for impacts to trust resources and the potential for the Service to make a claim for natural resource damages. The spill resulted from a break in a sewage main owned by Muskegon County. The county responded quickly and thoroughly to the unexpected break. The pipe was 27 years old and had been expected to last 50 years, but was originally purchased from a company that has since gone bankrupt because of similar failures. The county has now commissioned a major engineering study to determine the feasibility of replacing the entire line at a cost of \$35 to \$50 million. Approximately 20 dead fish, primarily carp and suckers, were reported at the urban creek where the spill first entered the water. Fish kills were not observed in the much larger Muskegon Lake,

presumably because of cool temperatures, dilution including rain during the spill event, and the ability of fish to escape to un-impacted areas of the large lake. Michigan Department of Environmental Quality (MDEQ) will continue to monitor the biota of Muskegon Lake and consider possible enforcement actions. At this time, the impact of the spill on the Service's trust resources does not appear to merit pursuing a natural resource damage assessment against Muskegon County, especially since the pipe manufacturer is not a viable party. 4/30/99

Decaster Lake Restoration Project on the Oneida Indian Reservation

Green Bay Field Office

Decaster Lake was purchased by the Oneida Tribe of Indians of Wisconsin in 1995. In 1996, the Service's Green Bay Fishery Resources Office began working cooperatively with the Tribe to develop a fishery. All sampling has consisted of a two-night, mark-recapture electroshocking assessment performed shortly after ice out. Habitat structures have been added to the lake each year including brush bundles and fish cribs. Aquatic vegetation has been planted to provide cover for fish and food for other wildlife. Fathead minnows were stocked to provide a forage base for the lake. Several gamefish species have been stocked including largemouth bass, walleye, rainbow trout and bluegill. The 1999 results display a largemouth bass population that has shown a large increase in recruitment each year since structure was

added to the lake. The largemouth bass population, the put-and-take rainbow trout, and the recently stocked bluegill have created a kids fishing area for the Tribe. A fishing day event will be planned to open the lake to kids only fishing in the spring of 2000. 5/15/99

Quarry Lake Fishery Assessments Performed on the Oneida Indian Reservation

Green Bay Field Office

The Green Bay Fishery Resources Office and the Oneida Tribe of Indians of Wisconsin performed an annual electroshocking assessment on Quarry Lake in May, 1999. The assessment helps identify the composition and abundance of each species. An electroshocking boat was used shortly after ice out to perform the night assessment. All fish sampled were counted while adult gamefish were measured, weighed and had scale samples taken. Largemouth bass and bluegill were the most numerous gamefish, with population estimates at 96 and 525 individuals, respectively. Several rough fish were sampled including carp and white sucker. Walleye have been stocked in alternate years for a put-and-take fishery. Data collected enables the Tribe to make management decisions as necessary. The Oneida Conservation Corps participated in all aspects of the survey including electroshocking, collecting biological information, and data recording. A complete management history of the lake (1987-1999) is scheduled to be completed in the spring of 2000. Partners include: Oneida

Tribe of Indians of Wisconsin. 5/15/99

Media Contact on Saginaw Settlement

East Lansing Field Office

Lisa Williams provided background information on the recent \$28 million settlement with General Motors for natural resource damages in the Saginaw River and Bay to Irene Portnoy of the Bay City Times for an editorial she is developing. The settlement was lodged with the court in November of 1998 and then a motion for entry was filed with the court in February of 1999, following a public comment period. Ms. Portnoy's interest is in when the judge might sign the motion for entry. 5/30/99

Plover Stewards Training a Success

East Lansing Field Office

Twenty-nine people attended and help host the 1999 Field Training for Piping plover stewards that work throughout Michigan and in Northern Indiana. In addition, several others received the Piping Plover Protocols Notebook with emergency Contacts and day-to-day instructions on how to observe and protect piping plovers. Representatives from State and Federal agencies, non-government organizations and private citizens attended as part of the network of protection plover stewards provide throughout the Great Lakes. Stewards were taught field skills such as piping plover behavior, sex, and color-band identification. Service law enforcement agents provided

an excellent summary of how and when to record observations, how to involve law enforcement in potential incidents. Sleeping Bear Dunes provided facilities and supplies for the training session. Partners include: National Park Service, Sleeping Bear Dunes National Lakeshore and Indiana Dunes National Lakeshore, Michigan Department of Natural Resources, Parks and Recreation and Wildlife Division, National Audubon Society, Whitefish Point Bird Observatory, University of Minnesota, University of Michigan, National Forest Service, Hiawatha National Forest and private citizens. 5/30/99

Green Bay FRO Surveys Streams on the Oneida Indian Reservation

Green Bay Field Office

The Green Bay Fishery Resources Office and the Oneida Tribe of Indians of Wisconsin have set up eleven index sites on seven streams for annual monitoring on the Oneida Reservation. The objectives were to identify species composition, describe the biological health of each stream, document seasonal fish migration from the Bay of Green Bay, and collect contaminant samples. A report detailing data collected in 1998 was completed in June 1999. Sampling was performed with electroshocking equipment during the spring, summer and fall. A total of 4,523 fish representing 36 species were sampled during 1998. The three most numerous species were creek chub, white sucker and johnny darter. Gamefish species

sampled include largemouth bass, walleye, brook trout, chinook salmon, northern pike and smallmouth bass. An Index of Biotic Integrity (IBI) score was calculated for each applicable site. The IBI was developed to measure the biological health or integrity of small streams. The IBI scores will enable the Tribe to determine the impact large scale development has on stream health. Partners include: Oneida Tribe of Indians of Wisconsin. 6/1/99

Fishery Surveys on the Forest County Potawatomi Indian Reservation

Green Bay Field Office

The Green Bay Fishery Resources Office and the Forest County Potawatomi Tribe (Tribe) completed fishery surveys on four lakes on the Reservation during 1999. Two lakes had fyke nets set for 24 hours while the other lakes were electroshocked at night. All adult gamefish sampled were measured, weighed and had scale samples taken. Rough fish were counted only. Gamefish sampled included largemouth bass, yellow perch, black crappie, and bluegill. All surveys were completed with the cooperation of the Forest County Potawatomi Environmental Department. Survey results will be used by the Tribe to develop a fishery management plan for the reservation. 6/15/99

1999 Kirtland's Warbler Singing Male Census Reaches All-Time High

East Lansing Field Office

Intensive jack pine forest management and the continuation of brown-headed cowbird trapping in Kirtland's warbler nesting habitat contributed to an all-time high of 904 singing males counted in the 1999 Kirtland's warbler census. Of the 904 males counted, 19 were found in managed jack pine forests in the upper peninsula of Michigan. Also, Canadian officials located one singing male in the Province of Ontario, bringing the world population of Kirtland's warbler to an unprecedented 905 singing males. The June census involves volunteers from the U.S. Fish and Wildlife Service, U.S. Forest Service, Michigan Department of Natural Resources, Michigan Audubon Society and local bird watchers. The Kirtland's warbler, one of the nation's rarest songbirds, was one of the first species to be placed on the Endangered Species List in 1973. The Kirtland's warbler was first collected in 1851 near Cleveland, Ohio. Its Bahama wintering grounds were discovered in the 1880's. It wasn't until 1903 that a nest was found by a trout fisherman near the AuSable River in Grayling, Mich. The first census of the Kirtland's warbler started in 1951 when 432 singing males were counted. The Kirtland's warbler has specific nesting habitat requirements (young jack pine forests), conforms to colonial nesting behaviors and territorial males have a persistent,

distinctive song which accounts for accuracy in census data. The 1961 census counted 502 singing males. The 1971 census revealed a drastic 60 percent decline with only 201 singing males counted. Biologists concluded the reason for the decline was that fire, the historic method of producing young jack pine stands, was suppressed and there was a noticeable increase of brown-headed cowbirds. The brown-headed cowbird, an obligate nest parasite, was found parasitizing over 70 percent of Kirtland's warbler's nests. In 1972, biologists from the U.S. Fish and Wildlife Service's East Lansing Field Office started a cowbird removal program on Kirtland's warbler nesting grounds. The first year of trapping reduced cowbird parasitism from 70 percent to less than 6 percent on Kirtland's warbler nests. From 1972 through 1987, since the beginning of the trapping program, the warbler population remained stable at around 200 birds. In 1986 a wildfire burned through the core of the Kirtland's warbler nesting area creating excellent habitat for the bird. This wildfire was the catalyst for the species' population to steadily increase and take hold. The U.S. Fish and Wildlife Service is dedicated to working with others to conserve fish, plants and wildlife and their habitats. The encouraging results of the endangered Kirtland's warbler's population increase, reinforces the Service's mission. Partners include: U.S. Forest Service, Huron National Forest; Michigan Department of

Natural Resources; Michigan Audubon Society; local volunteer birders 6/16/99

Workshop Trains Eastern Prairie Fringed Orchid Volunteer Force

Chicago Field Office

The Chicago Illinois Field Office and The Nature Conservancy conducted a training workshop at the Wadsworth Prairie June 26, 1999, for volunteer monitors for the eastern prairie fringed orchid. Field Office staff demonstrated gathering detailed demographic data on the orchids, reviewing site management results, and hand-pollinating the orchids. Marlin Bowles, of Morton Arboretum, explained how the demographic data gathered by the volunteers will help to identify needed recovery actions and evaluate results of site management and recovery work. Motivated volunteers were trained to conduct orchid recovery work at 17 sites in northeastern Illinois. The volunteer force manages natural areas supporting the prairie orchid in the winter and monitors, hand pollinates, collects and disperses seed in the growing season. Contact between the volunteers and the species experts is very important in motivating an excellent volunteer force. On-the-ground restoration and habitat management for this threatened plant species occur at these 17 sites through the volunteer recovery program. Partners include: Morton Arboretum and The Nature Conservancy. 6/22/99

Service Working With Landowners to Protect the Eastern Prairie Fringed Orchid

Chicago Field Office

Through the Partners for Fish and Wildlife Program, the Service funded prairie management work at three privately owned sites in Illinois that support the threatened eastern prairie fringed orchid. Populations of the prairie orchid decline in the absence of natural prairie ecosystem processes, such as fire and small patch disturbances, that reduce competition from non-native and other vegetation. The Habitat Agreements for two of the projects will protect 13 acres of prairie orchid habitat for the next 25 years. The third site is already a dedicated nature preserve. Partners include: The Nature Conservancy. 6/30/99

Service, Partners Plan Cleanup of Contaminated Sites at Midewin National Tall Grass Prairie

Chicago Field Office

The Chicago Field Office participated on two workgroups focused on contaminant issues at the Midewin National Tall Grass Prairie, formerly the U.S. Army's Joliet Arsenal. For years, the Army manufactured explosives and other munitions on the site. As a result, much of this site is contaminated with the chemicals used in the manufacturing process. Other portions of the site were used for agricultural purposes. On Nov. 4, 1998, the Army, U.S. Environmental Protection Agency and the Illinois Environmental Protec-

tion Agency signed a record of decision for the soil and ground water contaminants at this site. The record of decision did not establish clean-up levels for soil, but provided for the establishment of soil clean-up levels by work groups consisting of members from state and federal agencies. The Service collaborates on the ecological work and management groups to ensure that trustee resources are adequately considered and that clean up levels will be protective of the environment. We have established good working relationships with several partners in this effort. The clean up levels should be established by spring 2000. Partners include: U.S. Environmental Protection Agency; U.S. Forest Service; U.S. Department of Agriculture; U.S. Army; U.S. Army Corps of Engineers; Illinois EPA; Illinois DNR; citizens groups and consulting firms. 6/30/99

Saving the Kirtland's Warbler From Extinction-The Brown-headed Cowbird Trapping Program

East Lansing Field Office

The Kirtland's warbler, one of the nation's rarest songbirds, was one of the first species to be placed on the Endangered Species List in 1973. This highly specialized blue and yellow sparrow-sized bird nests nowhere in the world but northern Michigan.

There are two main reasons why the Kirtland's warbler is in danger of extinction. The Kirtland's warbler nests only in an extremely limited habitat — young jack pine forests growing

on a special type of sandy soil found in the northern lower Michigan. Over the years humans have changed the forest and now there is a shortage of good nesting habitat. Additionally, nest parasitism by brown-headed cowbirds has impacted Kirtland's warbler reproduction. The brown-headed cowbird has spread from the Great Plains into Michigan because of the large-scale change in its habitat. The brown-headed cowbird is an obligate nest parasite. The cowbirds lay their eggs in warbler (and other songbird) nests. The warblers then raise cowbird young instead of their own. Cowbird parasitism reduced warbler annual production to less than one young per pair prior to 1972. In an effort to alleviate cowbird parasitism and facilitate the recovery of the endangered Kirtland's warbler, wildlife biologists from Service's East Lansing Field Office have been trapping and removing cowbirds from warbler nesting areas since 1972, a 28-year effort. Trapping activities in 1999 started Apr. 20 and ended June 30, 1999.

In 1999, 67 cowbird traps were activated in nine counties located in the northern lower peninsula of Michigan. Brown-headed cowbird traps were strategically located in known Kirtland's warbler nesting areas. Live cowbird decoys were placed in the traps with sufficient food, water and roosting areas. The live decoys attracted other cowbirds into the traps through vocalizations and visual stimulus.

Also this year, biologists removed 4,399 cowbirds from Kirtland's warbler nesting areas. Since the trapping program began in 1972, the program has successfully removed 112,851 cowbirds from critical warbler nesting habitat. Because of the brown-headed cowbird trapping program conducted by the U.S. Fish and Wildlife Service (and intensive habitat management by Michigan Department of Natural Resources and U.S. Forest Service), Kirtland's warbler nesting pairs have increased from less than 200 pairs in 1972 to over 900 pairs in 1999. The Service is dedicated to protecting and conserving the nation's natural resources. The brown-headed cowbird trapping program in Kirtland's warbler nesting habitat allows the Service to fulfill this requirement concerning the endangered Kirtland's warbler. Partners include: U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services; Michigan Department of Natural Resources; U.S. Forest Service's Huron National Forest. 6/30/99

Chicago Field Office Contributes to Biodiversity Recovery Plan

Chicago Field Office

The Chicago Field Office has worked extensively in the development of a draft Regional Biodiversity Recovery Plan prepared by Chicago Wilderness, a coalition of about 90 agencies and organizations. Staff attended several meetings which provided direction that was used to develop the first draft, and staff prepared some sections of the plan. We prepared detailed

comments on a first draft, and these comments were incorporated into a public review draft. We continue to work with various partners to implement the plan. This effort represents the first known attempt by an urban area to develop a plan to preserve and restore the native biodiversity for an entire region. 6/30/99

Service Participates in Grand Traverse Bay Days

East Lansing Field Office

Increased protection of threatened and endangered species in the Grand Traverse Bay area of Michigan is due to increased education and cooperation of citizens and groups, including realtors. Staff from the East Lansing Field Office participated in Bay Days, an informational and educational celebration of the Grand Traverse Bay watershed. The focus is on water quality and natural resource protection. Many agencies, non-government organizations, and vendors relating to the topic of water quality or resource protection were present. The Service displayed a table-top panorama of Service activities and provided information on activities specific to the Grand Traverse Bay area. About 2,000 people visited Bay Days. One feature was tall ships, four schooners were present for people to explore, and invited guests who have helped protect Grand Traverse Bay were taken for a schooner trip on the Bay. Partners include: Grand Traverse Bay Watershed Initiative and all groups involved in the initiative: Sea Grant, USGS, Partners for Smart Growth, Michigan State University,

Grand Traverse County, Michigan Departments of Natural Resources and Environmental Quality. 6/30/99

NRDA Consent Order Signed; Settlement Provides Millions For Habitat, River Cleanup

East Lansing Field Office

The consent judgement on natural resource damages from PCB contamination of the Saginaw River and Bay was signed by a federal judge June 4, 1999, paving the way for the removal of 350,000 cubic yards of PCB-contaminated sediment from the Saginaw River. The NRDA settlement also transfers more than 1,600 acres of habitat to the public, restoration of 200-400 acres of coastal wetlands, restoration of fish spawning habitat, projects at a Service learning center, long-term monitoring of restoration, and increased nature-viewing and recreational opportunities at 3 sites. As of June 30, 1999, the parties are complying with the judgement. General Motors has already deposited \$10.64 million in the Department's NRDA account to be used for dredging, and is preparing to transfer 1,600 acres of land to the Service, the Saginaw Chippewa Tribe, and the Michigan Department of Natural Resources. Partners include: Michigan Department of Environmental Quality, Saginaw Chippewa Tribe, Department of Interior, Department of Justice, Michigan Attorney General's Office and Saginaw News. 6/30/99

Service Joins Volunteers to Pollinate Hundreds of Threatened Prairie Orchids in the Chicago Region

Chicago Field Office

The Chicago Field Office and volunteers from The Nature Conservancy's Volunteer Stewardship Network continued a sixth summer of pollinating and monitoring the eastern prairie fringed orchid. The human pollination efforts are part of a recovery strategy that includes habitat management and protection of the wet prairies and sedge meadows where this species was once widespread. For the second year, CIFO staff and volunteers gathered detailed demographic data to support research at the Morton Arboretum. The Illinois populations of the eastern prairie fringed orchid have been maintaining or increasing in viability according to indicators of viability established in the recovery plan. While many factors affect the status of this threatened plant, certainly without the work of the volunteer force these populations would have continued to decline due to lack of management. These populations are particularly important to recovery of the orchid as a large number of the populations needed to meet recovery criteria for this species occur in Illinois. The work of the volunteers is also contributing to research that will help determine the life history requirements of the orchid and better inform recovery work. Partners include: The Nature Conservancy, Morton Arboretum, Chicago Botanic Garden,

Forest Preserve District of Cook and Lake counties, Ill.
7/1/99

Service Supports Genetic Diversity Analysis of Threatened Orchids in the Chicago Region

Chicago Field Office

The Endangered Plant Research Department of the Chicago Botanic Garden conducted laboratory analysis of tissue samples from the eastern prairie fringed orchid to examine the genetic variation present within and between orchid populations in the Chicago region. The study, funded by the Service's Chicago Field Office, will provide scientific data to guide recovery efforts, including hand-pollination and reintroduction of orchid seeds into potential orchid habitat in Illinois. Partners include: The Nature Conservancy, The Chicago Botanic Garden. 7/1/99

Tours Promote Public Participation in Recovering of the Endangered Kirtland's Warbler

East Lansing Field Office

The Kirtland's warbler, one of the nation's rarest songbirds, was one of the first species to be placed on the endangered species list in 1973. There are only about 900 pairs of Kirtland's warblers in existence and 98 percent of these nest in the jack pine forests of northern lower Michigan. Because of its rarity, hundreds of tourists flock from all over the world for a chance to learn about and perhaps see the Kirtland's warbler in its natural habitat. In order to minimize habitat disturbance and enhance viewing opportunities, biologists from the Service's East Lansing

Field Office conduct guided tours on known Kirtland's warbler breeding grounds in the jack pine forests of Michigan. This year, more than 900 visitors participated in the Service's tour program representing 42 states, three Canadian provinces, Australia, Germany and the United Kingdom. Two daily tours were available seven days a week between May 15 and July 4, 1999. Since 1976, over 16,400 individuals attended Kirtland's warbler tours. The Service is dedicated to protecting and conserving the nation's natural resources. Public recognition of the importance of an endangered species is a step on the road to recovery for a species. The Kirtland's warbler tours are one way the Service is able to educate people about the Kirtland's warbler and thereby involve the public in the recovery of this endangered species. Partners include: U.S. Forest Service, Huron National Forest; Michigan Department of Natural Resources; Michigan Audubon Society and Holiday Inn Grayling, Mich. 7/4/99

Eastern Prairie Fringed Orchid Reintroduced at Chicago Site

Chicago Field Office

Eastern prairie fringed orchids restored to a sedge meadow in Kane County, Ill., bloomed again this summer, and in greater numbers. As part of the eastern prairie fringed orchid restoration project, the Chicago Field Office and The Nature Conservancy have been working with volunteers to disperse seeds produced by hand-pollinating the prairie orchids into suitable habitat in

the Chicago region. In 1998, 13 plants bloomed at a site where seeds had been dispersed four years earlier. This summer, the volunteer monitor found 32 plants. A new population of this threatened orchid species has been established and is being managed within the historic range of the species in Illinois, which is a step toward recovery. The orchid's success at this site demonstrates that the eastern prairie fringed orchid can be introduced to suitable sites through seed dispersal by humans. Partners include: The Nature Conservancy. 7/7/99

Recovery Plan Drafted for Hine's Emerald Dragonfly; Available for Public Comment
Chicago Field Office

The draft recovery plan for the endangered Hine's emerald dragonfly has been completed by the Chicago Illinois Field Office with much valuable help from the Green Bay Field Office. Letters received during the comment period, which ended Sept. 13, 1999, will be addressed at the November recovery team meeting. The Plan has received many letters of support from the public, particularly in Door County, Wisconsin, as well as favorable peer reviews from odonatologists. The high response rate from peer reviewers is due in part to the plan's availability at the July meeting of the International Union for the Conservation of Nature - Odonate Specialist Group at Colgate University in Hamilton, New York. Recovery Team Leader Dan Johnson has also been praised by expert odonatologists for his efforts.

Several members of the recovery team attended the meeting, presenting papers on the team's work for the Hine's emerald dragonfly. This is the first recovery plan to be prepared for a federally-listed dragonfly. Eleven expert odonatologist peer reviewers commented favorably on the plan and provided additional recommendations. Public support for the plan, especially in Wisconsin, was stimulated by outreach efforts after publication of the draft plan. 7/13/99

Chicago Field Office Developing Water Quality Strategy for Northeastern Illinois

Chicago Field Office

The Chicago Illinois Field Office is working with the Northeastern Illinois Planning Commission (NIPC) to develop a new Water Strategy for the region. Thus far, we have worked with a water quality task force and have identified about 15 major issues that affect water quality in the six county area. Our involvement is important because we can encourage the task force to recognize the influence healthy wetland habitat has on water quality, and the influence various construction practices have on water quality, and the ability of aquatic organisms to live in our waterways as an indicator of quality. These factors go beyond traditional chemical methods of evaluating water quality. The next step will be to identify strategies that may address the issues. This effort will result in local governmental policies that will be more protective of the regions waterways, lakes and wetlands. Part of the effort will reinforce a shift

to better management practices that will include greater attempts to protect streams near developments. Other initiatives may include methods to improve funding opportunities for deteriorating sewage treatment plants. Partners include: Northeastern Illinois Planning Commission, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers and citizens groups. 7/15/99

Discretionary Authority Over Selected Wetlands in McHenry County, Illinois

Chicago Field Office

The Chicago Field Office played a leadership role in the McHenry County Advance Identification (ADID) study, including authorship of part of the final report. On July 15, 1999, the U.S. Army Corps of Engineers' Chicago District and U.S. Environmental Protection Agency's Region 5 published a joint public notice announcing exertion of discretionary authority over selected wetlands and waters in McHenry County, Ill. This means that the nationwide permit program does not apply to these selected wetlands and waters identified through the McHenry County ADID study. This represents the culmination of a two year study that identified those wetlands and waters of highest quality and functions in the county, that are not likely to receive permits for filling or modification. The final study results are published on a user-friendly CO-ROM. Building upon the final report partially authored by the Service's Chicago Field Office, the joint public notice revokes

the nationwide permits for the wetlands designated as high quality or high functional value in the ADID study. This enables a more rigorous review for any impacts proposed to these wetlands and waters identified through field work as the highest quality in the county using standardized methodology. The study results and maps published on CD-ROM enable any user to identify the locations of these highest quality aquatic resources and plan accordingly. The maps will also serve as an important tool in land planning, public land acquisition, and wetland restoration activities in McHenry County, Ill. Partners include: U.S. Army Corps of Engineers Chicago District, U.S. Environmental Protection Agency Region 5, U.S. Department of Agriculture, Natural Resources Conservation Service, McHenry County Soil and Water Conservation District, McHenry County Conservation District, Illinois Department of Natural Resources. 7/15/99

Demonstration Project Caps Contaminated Sediment with AquaBlok

Reynoldsburg Field Office

The U.S. Army Corps of Engineers Buffalo District has issued a permit to the City of Toledo, Ohio, to conduct a demonstration project involving the encapsulation of PCB contaminated sediments in the Ottawa River, a tributary of Lake Erie. Three separate one-acre areas will be covered with "AquaBlok," a combination of bentonite clay, polymers

and a solid nucleus. The AquaBlok particles expand on contact with water to form a coating over the sediments. Each of the three adjacent, one-acre areas will be covered with approximately 183 tons of AquaBlok in slightly different layering. Area A will be covered only with AquaBlok. Area B will be constructed of two layer of AquaBlok separated by a single geotextile layer. Area C will be constructed similar to B, but with an additional layer of protective stone on top. The cap will be about five to six inches in areas A and B and seven to eight inches in area C. A five-year monitoring plan has been developed. The cap will be monitored for physical integrity. Ohio EPA staff will conduct pre and post project macro-invertebrate sampling. 7/20/99

Chicago Field Office Projects Encourage Biodiversity for Backyards

Chicago Field Office

Three habitat projects recently completed with the support of the Service's Chicago Field Office will help urban/suburban landowners better appreciate native landscapes and incorporate these features into their own yards. A one-acre natural habitat garden has been created at the City of Chicago's North Park Village Nature Center.

The site is accessible to persons with disabilities and consists of examples of native prairie, savanna, woodland, and wetland habitats of Illinois. The entrance garden is designed with interpretive signage to familiarize the Center's 60,000 annual visitors with the native

habitats of Illinois and promote the use of native plantings in urban settings.

The Conservation Foundation teamed with 125 fourth graders from Kingsley elementary school to plan and plant a butterfly garden at the Foundation's headquarters in Naperville, Ill. The students (with a little help) researched butterflies and plants to design the garden and in June came out to help plant it. The garden and native landscaping around the office will be used for educating homeowners in the Naperville area on the aesthetics and benefits of using native plants. In early June, more than 20 volunteers, including local garden club members and cub scouts, helped plant a four-acre prairie on the Frankfort Public Library property. The prairie landscape was designed, planted and funded by volunteers. The goal was to "establish a little bit of prairie in the prairie state." A winding path along the edge will allow patrons and school groups to view the prairie throughout the seasons and use the site for educational purposes and as a link to the areas natural history. Partners include: The Conservation Fund, City of Chicago, The Conservation Foundation, The Village of Frankfort Public Library, local garden club, and Illinois Department of Natural Resources. 7/27/99

Hine's Emerald Dragonfly Exhibit Educates Public at Brookfield Zoo Festival

Chicago Field Office

Staff and interns from the Chicago Field Office developed an educational booth highlighting the Service's recovery efforts

for the endangered Hine's emerald dragonfly. The booth was staffed during a two-day Dragonfly marsh festival at Brookfield Zoo in August. The information booth helped educate the public about the presence of an endangered species in the Chicago metropolitan area, and how the Service is working with the recovery team and partners such as the Illinois Department of Natural Resources and forest preserve districts, to protect and recover the dragonfly. Copies of the "Homeowner's Guide to Wetlands," the updated Hine's emerald dragonfly fact sheets, and the Draft Recovery Plan were distributed. For children, the booth included an aquarium of larval dragonflies, dragonfly life cycle coloring books, and a dragonfly habitat game. Educational materials, including coloring books and a game, were developed to teach children about biodiversity, habitat, and dragonfly biology. Awareness of opportunities to teach about endangered this endangered species was raised among the zoo educational staff. 8/16/99

Waubonsie Creek Dam Removal/Habitat Improvement

Chicago Field Office

In July 1996, Waubonsie Creek, a tributary of the Lower Fox River, was inundated by record floods causing the Stonegate dam in Oswego, Ill., to fail over approximately 50 percent of its length. Rather than rebuild the dam, the Oswegoland Park District took an innovative approach and chose to restore this stretch of the Creek to a

more natural condition. The project involved modifying the remainder of the dam, converting it to a riffle structure. Two additional riffle structures were installed upstream of the dam to create better fish habitat and to facilitate fish passage over the next dam in the stream, promoting an improved fishery to greater area of the stream than is currently feasible. Since the dam failed, the creek corridor has reached an interim riverine-type equilibrium including wetland re-establishment. These wetlands and some additional restored acreage will be enhanced through invasive species control and additional plantings. The stream itself will be improved with the installation of two additional riffles upstream of the first and installation of lunger structures along the cutting bank rather than traditional hardscape streambank stabilization. The project enhances acre of existing wetland, restores one-half acre of new wetland, improves 820 linear feet of in-stream habitat with 3 riffle/pool structures, and enhances 200 linear feet of streambank with fish habitat (lunker) structures. Wetland dependent migratory birds will benefit from this project as wetland habitat in the corridor is restored and enhanced and as the fishery improves providing additional food resources for these wetland associated species. The increased diversity in the system will benefit other species of wildlife as well including fish, aquatic macroinvertebrates, mammals, amphibians and reptiles.

Waubonsie Creek is a tributary to the Lower Fox River. The Creek is approximately 10.8 miles long with a watershed of roughly 29.6 square miles (18,950 acres). The drainage basin is typical of a watershed under development. In November 1996, a watershed resource planning committee was formed to develop a watershed plan and recommendations to increase awareness of the creek, to reduce flooding, and to improve the quality of the creek. This project is endorsed by this plan and will improve the biological resources in the stream. Partners include: Oswegoland Park District, U.S. Department of Agriculture Natural Resources Conservation Service and Illinois Department of Natural Resources. 7/30/99

Contaminated Sediment Capped with AquaBlok

Reynoldsburg Field Office

This demonstration project will determine the feasibility of encapsulating contaminated sediments with a material bentonite, a polymer material. The Buffalo District, Army Corps of Engineers has issued a permit to the City of Toledo, Lucas County, Ohio to conduct a demonstration project of the encapsulation of PCB contaminated sediments in the Ottawa River, a tributary of Lake Erie. Three separate one acre areas will be covered with AquaBlok, a combination of bentonite clay, polymers and a solid nucleus. Upon contact with water the AquaBlok particles expand to form a coating over the sediments. Each of the three adjacent,

one-acre areas will be covered with approximately 183 tons of AquaBlok in slightly different layering. Area A will be covered only with AquaBlok. Area B will be constructed of two layer of AquaBlok separated by a single geo-textile layer. Area C will be constructed similar to B, but with a additional layer of protective stone on top. Total thickness of the cap will be about five to six inches in areas A and B; seven to eight inches in area C. A five-year monitoring plan has been developed. The cap will be monitored for physical integrity. 7/30/99

Chicago Field Office Studies Mitigated Wetlands

Chicago Field Office

In the Spring and Summer of 1999, the Chicago Field Office participated in a mitigation wetlands study with Max McGraw Wildlife Foundation, East Dundee, Ill. The study provides improved information on wildlife use of mitigation wetlands in the Chicago region. The two-year study focuses on all wildlife (e.g., birds, reptiles, amphibians, fish and aquatic macroinvertebrates) in mitigation and natural wetlands. Our efforts focused on the amphibians and reptiles (collectively called "herps") in the study. Herp abundance and diversity information was obtained by the use of pitfall traps, turtle traps and visual searches. By providing this information, an evaluation of the wildlife habitat value of mitigation wetlands in the Chicago region can be ascertained, and this information should help us

design better quality wetlands in the future. Partners include: U.S. Environmental Protection Agency and Max McGraw Wildlife Foundation. 7/31/99

Reynoldsburg Biologist Teaches ESA to Forest Service Line Officers

Reynoldsburg Field Office

Buddy B. Fazio, endangered species biologist at the Service's Reynoldsburg Field Office, was presented with an appreciation award by the Lewis and Clark Law School of Oregon. Fazio served as Endangered Species Act instructor at two 1999 training sessions held for approximately 100 U.S. Forest Service Line officers from across the United States. Fazio and members of the Lewis and Clark Law School taught Endangered Species Act section 7 consultation, section 4 listing and recovery, and pre-listing (candidate) conservation. The course ensures that U.S. Forest Service decision makers are familiar with requirements of and processes under the Endangered Species Act. This means the needs of endangered species will be better addressed on national forest lands. Partners include: Lewis and Clark Law School of Oregon, U.S. Forest Service, Cincinnati Nature Center and Ohio Biological Survey (bats). 8/20/99

Illinois Urban Manual Updated; Promotes Protection of Urban Ecosystems

Chicago Field Office

With help from the Service's Chicago Field Office, the first batch of updates to the "Illinois Urban Manual: A Technical Manual Designed for Urban Ecosystem Protection and Enhancement," were published by the U.S. Department of Agriculture's Natural Resources Conservation Service. To date, seven standards, nine drawings, and four introductory sections of the Illinois Urban Manual have been updated and published. The updates, completed by the Statewide Community Assistance Committee are the first in a series of updates that will align the manual with best management practices (BMPs). The Chicago Field Office is a member of the statewide committee and has endeavored to take the lead in rewriting several standards that use native vegetation and benefit wildlife. When completed, these standards will be used by the Illinois Environmental Protection Agency and the Illinois Department of Transportation for all permits and projects throughout Illinois. The standards will help protect natural resources through better water quality treatment, buffers and erosion control as well as opportunities for better wildlife habitat through the use of BMPs and native vegetation. 8/2/99

Improved Illinois County Watershed Ordinance Protects Trust Species

Chicago Field Office

After final adoption by the County Board, the new Lake County, Ill. Watershed Development Ordinance went into effect Aug.10, 1999. The ordinance culminates two years of work revising their previous ordinance. Many revisions were aimed at providing greater protection to natural resources such as wetlands and lakes. The Chicago Field Office was represented on the Technical Advisory Committee where the bulk of the revision work and lengthy debates occurred. The strong local ordinance protects trust resources and provides direct improved protection for natural resources such as wetlands, streams, and lakes. It requires buffers to these features and references the Endangered Species consultation process where appropriate. The Service's Chicago Field Office will continue to work with the county in the implementation of the ordinance through the Technical Advisory Committee. Although opposed by home building industry, the ordinance has good local political support. Partners include: Lake County Stormwater Management Commission, Lake County Forest Preserve District, Lake County Home Builders Association, Northeastern Illinois Planning Commission, local municipalities, and the Natural Resources Conservation Service. 8/10/99

With Service Help, Northern Illinois Mitigation Banks Achieve Success

Chicago Field Office

A portion of two of the mitigation banks permitted in northeastern Illinois have achieved full certification by meeting all performance standards outlined in the Interagency Coordination Agreement on Mitigation Banking for the Chicago District. The Service's Chicago Field Office played an instrumental role in the establishment of the the Interagency Agreement, setting the performance standards, and in evaluating the performance of these banks. A significant portion of these two banks, among the first permitted in the country, have met all performance standards and expectations and are fully functioning wetlands. Thus, we have been successful in setting and enforcing a standard that achieves full restoration of wetland functions in the landscape. Partners include: U.S. Environmental Protection Agency, U. S. Army Corps of Engineers - Chicago District, Land and Water Resources, Inc., Wetlands Research Inc. 8/15/99

Lake County Wetland Inventory Updated

Chicago Field Office

Since its initial publication in 1993, the Lake County Wetlands Inventory (LCWI) has come into widespread use, being the generally accepted wetlands inventory for local units of government, and state and federal agencies in their planning and regulatory efforts. While not a regulatory map, the LCWI is referenced in a number

of local ordinances and is utilized as a tool in Section 404 Clean Water Act permit reviews by the Service. Recognizing its widespread use and utility, the Service's Chicago Field Office has signed a memorandum of understanding with Lake County and our sister federal agencies to update the LCWI following standardized protocols. This will enable publication of a more current map product that will have greater credibility among the regulated public, and enable better wetland protection in Lake County. Partners include: Lake County Management Services, U.S. Department of Agriculture's Natural Resources Conservation Service, U.S. Army Corps of Engineers Chicago District, Lake County Soil and Water Conservation District, and U.S. Environmental Protection Agency Region 5. 8/18/99

Ohio Coastal Zone Management and Endangered Species

Reynoldsburg Field Office

The Service's Reynoldsburg Field Office is working to ensure that Ohio's Coastal Zone Management Program continues to include the needs of federally threatened and endangered species. A Memorandum of Understanding was finalized two years ago that identifies steps and actions to address federally threatened and endangered species issues pertinent to Ohio's Coastal Zone Management Program. Subsequent informal coordination under the Coastal Zone program has resulted in positive gains for Federally listed species, especially the federally threatened Lake Erie

water snake. Partners include: Coastal Zone Management Office, Ohio Division of Real Estate and Land Management, Ohio Department of Natural Resources; National Oceanic and Atmospheric Administration. 8/20/99

Ohio Partners Study Endangered Indiana Bat's Use of Forest Habitat

Reynoldsburg Field Office
The Service's Reynoldsburg Field Office is working with the Ohio Division of Wildlife and U.S. Forest Service to study how the federally-endangered Indiana bat uses habitat on forested land in Ohio. During 1999 and 2000, male and female Indiana bats are being outfitted with radio transmitters allow biologists to follow the bats. This allows biologists to examine which parts of the U.S. Forest Service's Wayne National Forest in Ohio are used by the bats for roosting, raising young, and winter hibernation. The study will help biologists learn how best to manage national forests for both Indiana bats and wood production. Increased knowledgeable management of national forest land for Indiana bats will help avoid and minimize future impacts to the bats and help with overall Indiana bat recovery. Partners include: U.S. Forest Service, Ohio Division of Wildlife and Eastern Kentucky University. 8/20/99

Service, State and City Help Protect Threatened Orchids

Reynoldsburg Field Office

To conserve federally-threatened eastern prairie fringed orchids, the city of Dayton, Ohio, continues to work with the Service's Reynoldsburg Field Office and the Ohio Division of Natural Areas and Preserves. Ohio's second largest eastern prairie fringed orchid population occurs on a proposed high-volume water well pump field owned by the city of Dayton. The city built a conservation fence on the perimeter of their land to help protect the orchids. The city is also exploring different on-site water management regimes in an effort to identify which regimes will benefit the orchids. Partners include: Ohio Division of Natural Areas and Preserve and City of Dayton, Ohio. 8/20/99

Reynoldsburg Field Office Helps Manage Forests for Near-Candidates in Ohio

Reynoldsburg Field Office

The Reynoldsburg Field Office is working with the U.S. Forest Service's Wayne National Forest to enhance overall species diversity that benefits species which may or recently were close to needing Candidate species status, such as the cerulean warbler. The Wayne National Forest is integrating forest management practices into its Forest Plan which address the needs of both near-candidate species and species with federal threatened or endangered status. A Forest Plan amendment is the tool being used to integrate forest practices beneficial to forest

species. Partners include: Wayne National Forest, U.S. Forest Service and U.S. Department of Agriculture. 8/20/99

Service Works to Conserve Ohio's Only Population of Native Brook Trout

Reynoldsburg Field Office

The Reynoldsburg Field Office is working with public and private partners to conserve Ohio's only remaining native brook trout population. Ohio's native brook trout occur in one small stream in northeast Ohio. Partners have purchased the stream's 33-acre watershed for the purpose of conserving the trout and establishing a natural buffer between the stream and housing developments. Easements are in effect at nearby housing developments. Cooperative efforts to consult with developers and study genetics of the brook trout population have also occurred. Partners include: Ohio Division of Wildlife; Ohio Division of Natural Areas and Preserves; Geauga Metroparks; The Chagrin River Land Conservancy; The Nature Conservancy; U.S. Army Corps of Engineers and local landowners. 8/20/99

Reynoldsburg Staff Talks to Foresters About Bats and the Endangered Species Act

Reynoldsburg Field Office

The Service's Reynoldsburg Field Office led three significant meetings discussing forest management and the federally-endangered Indiana bat during 1999. Participating foresters in the meetings discussed requirements and options under the Endangered Species Act with respect to conserving Indiana bats and their habitat amid

forest production practices. The discussions occurred at the Ohio Forest Health Conference in May; a June meeting with the Chief of the Ohio Division of Forestry and a July meeting of the Ohio Chapter of Society of American Foresters. The Reynoldsburg Field Office has initiated a continuing dialog with Ohio foresters about the Indiana bat. Ohio foresters are responding positively to the Indiana bat dialog and are working with the Service to better understand how forest production practices can incorporate the needs of federally endangered species. The dialog may eventually lead to the adoption of forest practices on public and private land across Ohio which benefit Indiana bats.

Partners include: Ohio Division of Forestry, Ohio Woodland Partners Association and the Ohio Chapter of the Society of American Foresters. 8/20/99

Surveys Locate Additional Populations of the Endangered Hine's Emerald Dragonfly

Chicago Field Office

The Chicago Illinois Field Office funded a third year of surveys to locate populations of the Hine's Emerald Dragonfly. A new population was discovered this summer near Alpena, Mich. This is the first population to be found in Michigan's lower peninsula. An additional Wisconsin population was discovered this summer at Cedarburg bog, a state and university owned natural area just north of Milwaukee, Wis. Bill Smith, a member of the Hine's emerald dragonfly recovery team and Wisconsin Department of

Natural Resources employee, was teaching a dragonfly workshop and identified one of the emerald dragonflies captured live by a student as a Hine's emerald. Hine's emeralds also turned up at a fen in Missouri during a Service-funded dragonfly survey by the Missouri Department of Conservation. The MDC biologist Linden Triall, primarily conducting a survey for the Ozark Clubtail, received a copy of the draft Hine's Emerald Dragonfly Recovery Plan and realized a specimen collected earlier this summer was the Hine's emerald dragonfly. Linden Triall will join the Hine's emerald dragonfly recovery team to lend her expertise on Missouri dragonfly habitat. Partners include: Michigan Natural Features Inventory, Missouri Department of Conservation, Wisconsin Department of Natural Resources and the University of Wisconsin. 8/30/99

Wilderness Shores Hydroelectric Settlement Agreement - Environmental Assessment

Green Bay Field Office

The Green Bay Field Office, together with several other stakeholders, completed work on Wisconsin Electric Power Company's Applicant Prepared Environmental Assessment (APEA) for the Wilderness Shores Hydroelectric (hydro) Settlement Agreement (WSSA), which was signed on Feb. 10, 1997. The impacts of the environmental and economic decisions reached by the stakeholders were enumerated in the APEA and compared to the no action alternative (existing condition). The environmental

benefits to the Menominee River Basin gained by the agreement were extensive including substantial improvement in project operations systemwide, a plan to protect fish from entrainment and turbine mortality, a plan to improve land and wildlife management on approximately 22,000 acres of project and non-project lands, protection of federally-listed threatened and endangered species and their habitats, and improvement to recreational facilities. Partners include: Wisconsin Electric Power Company, Wisconsin and Michigan Departments of Natural Resources, National Park Service, River Alliance of Wisconsin, and Michigan Hydro Relicensing Coalition. 8/31/99

Recovery Team Established for Endangered Illinois Cave Amphipod

Rock Island Field Office

The Rock Island Field Office has initiated the recovery process for the Illinois Cave Amphipod, a newly listed endangered species. A recovery team was established in September 1999, and the Service has convened two meetings of the group. The team includes a good mix of academicians, state agency personnel, and local stakeholders such as farmers. Several studies are in progress to delineate groundwater recharge areas, identify groundwater pollutants affecting the amphipod, monitor public use in caverns, and develop a non-lethal technique of identifying the species in its habitat. The team has begun preparation of a recovery plan and expects to have a draft plan completed by Fiscal Year 2000.

Partners include: Illinois Department of Natural Resources, Monroe County, Ill., Health Department and University of Illinois. 9/1/99

East Lansing Staffer Bands Ducks in Canada

East Lansing Field Office

Burr Fisher of the East Lansing Field Office completed a month-long duck banding detail in Canada Sept. 1, 1999. Fisher was part of a five-member crew that banded more than 8,800 ducks on four major areas within 40 miles of Wynyard, Saskatchewan. Twelve species of waterfowl were banded. Seventy percent of the ducks banded were blue-winged teal; mallards made up 24 percent of the total catch. Benning II swim-in traps were used baited with barley. Partners include: Canadian Wildlife Service and U.S. Migratory Bird Office. 9/1/99

Service Hears Public Concerns Over Kalamazoo River Contamination

East Lansing Field Office

Staff from the East Lansing Field Office presented information on the natural resources damage assessment process and other topics during a Sept. 9, 1999 meeting of the Kalamazoo River Protection Association. Lisa Williams, Craig Czarnecki, and Mike DeCapita of the East Lansing Field Office spoke to about 40 people about conservation topics relating to the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund site. Attendees expressed their interests in anything that might

speed up or improve the remediation of the river system which has been polluted by PCBs for decades. Service staffers explained the natural resource damage assessment process, how it relates to the Superfund cleanup process, and how it is likely to apply to the Kalamazoo River Superfund site. They also explained how the Endangered Species Act works and how it relates to the cleanup process and the Kalamazoo watershed. They also answered general questions about the U.S. Fish and Wildlife Service, about the Superfund site, and about our ability to influence events at the site. The public told us of their frustration with the slow pace of cleanup activities, the continuing injuries to bald eagles (perhaps through fish consumption), and the impact of contamination on local property values. The discussion lasted more than two hours with approximately 40 members of the public as well as employees and contractors for the Michigan Department of Natural Resources and the Michigan Department of Environmental Quality. Partners also included the Kalamazoo River Protection Association. 9/9/99

Public and Private Partners Work to Help Endangered Purple Cat's Paw Mussel

Reynoldsburg Field Office

The Reynoldsburg Field Office is working with partners from the Ohio Division of Wildlife, Otterbein College, Natural Resources Conservation Service, local officials and landowners to conserve the endangered purple

cat's paw pearly mussel. The Service, Ohio Division of Wildlife, and Ohio River Valley Ecosystem subgroup pooled funds and formed a watershed partners group to identify important watershed issues and projects important to recovery of the purple cat's paw mussel. Funds will be used for voluntary improvement of watershed habitat for the purple cat's paw on private land. Public education and mussel population monitoring are also being implemented by the Service and Ohio Division of Wildlife. Other partners include: Ohio Division of Wildlife, Natural Resources Conservation Service, Ohio River Valley Ecosystem Mussel Subgroup, Coshocton County Soil and Water Conservation District and landowners. 9/15/99

Service Role in Michigan's Project F.I.S.H. Promotes Ecology Through Education

East Lansing Field Office

Annette D. Williams of the East Lansing Field Office has joined the Steering Committee for Project F.I.S.H. (Friends Involved in Sportfishing Heritage) for the state of Michigan. Williams will teach aquatic ecology workshops for teachers, volunteers and others interested in starting programs for youth. Project F.I.S.H. promotes student involvement in the outdoors through educator workshops, sharing outdoor education curricula and promoting mentoring relationships. For more information regarding Project F.I.S.H., contact Mark Stephens at (517) 432-2700 or <http://www.projectfish.org>. 9/16/99

Water Snakes Welcome! Conservation and Education for Ohio's Lake Erie Water Snake

Reynoldsburg Field Office

The Reynoldsburg Field Office and the Ohio Division of Wildlife continue to successfully educate people and agencies about Lake Erie water snakes. The snakes are found on the islands of western Lake Erie and were recently declared federally threatened by the Service. Approximately 175 island landowners (out of 900 total owners) responded positively to a campaign to voluntarily post Lake Erie water snake conservation signs on docks, buildings, and other property. The Service continues to talk with developers and the U.S. Army Corps of Engineers about conserving Lake Erie water snake habitat as part of section 7 consultation under the Endangered Species Act. Partners include: Ohio Division of Wildlife; Ohio Division of Parks and Recreation; Ohio Coastal Zone Office, Division of Real Estate and Land Management, island landowners and Ohio State University Stone Lab. 9/20/99

Many Partner Projects in Ohio

Reynoldsburg Field Office

The Reynoldsburg, Ohio, Ecological Services field office is partnering on 14 different projects which benefit federally threatened and endangered species in Ohio. The currently active 14 agreements cover plants, such as the northern monkshood, mussels, the Karner blue butterfly, the Indiana bat, the American burying beetle, and many other species. The agreements are

funded via cooperation under Section 6 of the Endangered Species Act. Partners include: Ohio Division of Wildlife and Ohio Division of Natural Areas and Preserves. 9/20/99

Endangered Karner Blue Butterfly Flies Again in Ohio

Reynoldsburg Field Office

For the first time since 1988, endangered Karner blue butterflies are flying again over northwest Ohio. The Reynoldsburg Field Office is working with many public and private partners to re-establish Karner blue butterflies in the oak openings region of northwest Ohio. The Ohio Karner Blue Butterfly Recovery Team developed a State recovery plan for the Karner blue which facilitated reintroduction of the butterfly to northwest Ohio starting in 1998. Reintroduction efforts will continue in the year 2000 and beyond. Partners include: Ohio Karner Blue Butterfly Recovery Team, Ohio Division of Wildlife; Ohio Division of Natural Areas and Preserves, The Nature Conservancy, Toledo Zoo, Toledo Metroparks, Toledo Port Authority, Oak Openings Working Group and Ohio Division of Forestry. 9/20/99

Commercial, State, Federal Partnership 'Comes Up Daisies' in Ohio

Reynoldsburg Field Office

A successful three-way partnership is contributing to recovery of the federally-threatened Lakeside daisy in Ohio. The partnership exists between the LaFarge Corporation, the Ohio Division of Natural Areas and Preserves,

and the Reynoldsburg, Ohio, Ecological Services field office. The daisies occur largely on quarry land owned by the LaFarge Corporation, a French-owned company. All three partners cooperate to monitor, manage, rescue, and relocate daisies that are in harm's way due to blasting. The Division of Natural Areas and Preserves also owns a small preserve which protects large numbers of Lakeside daisies. Kelleys Island State Park is also partnering in the effort. 9/20/99

Chicago Field Office Helps Publish Fox River EcoPartnership Watershed Plan

Chicago Field Office

Almost two years in the making, the Fox River EcoPartnership Watershed Plan, authored in part by Chicago Field Office staff, is available for public comment. The Fox River EcoPartnership has approximately 50 member organizations. The comprehensive watershed plan, written with input from many interests and stakeholders, intends to guide development and conservation the the Fox River Watershed. The river was recently designated among the nation's 10 most endangered rivers by American Rivers, largely due to development pressures. This plan provides the tools to prevent the river, its tributaries and watershed from declining in quality as many fear. The Service's Chicago Field Office will continue to work with the partnership to implement the plan. The comprehensive plan includes sections on recreation, education, land use,

water quality stormwater and habitat and will guide conservation activity and land use decisions in the watershed. This proactive effort has received positive comments from Illinois Lt. Governor Corinne Wood. Partners include more than 50 organizations and state and local agencies. 9/22/99

Wildlife to Benefit From Agreement on Three Hydroelectric Projects on the Lower Chippewa River

Green Bay Field Office

The Green Bay Field Office, together with several stakeholders, has made substantial progress on formulating a settlement agreement with the Northern States Power Company for three hydro projects on the lower Chippewa River. Substantial benefits to fish, wildlife, and recreational resources are expected when the settlement agreement is completed, including substantial improvements in project operations systemwide, improvement of approximately 110 miles of riverine habitat, a plan to protect fish from entrainment and turbine mortality, a plan to improve land and wildlife management on project lands, protection of federally-listed threatened and endangered species and their habitats, and improvements to recreational facilities. Partners include: Northern States Power Company, Wisconsin Department of Natural Resources, National Park Service, U.S. Army Corps of Engineers, River Alliance of Wisconsin, Wisconsin Area Residents Association, Lake Holcombe Improvement Asso-

ciation, Lower Chippewa River Restoration Coalition, Chippewa Rod and Gun Club, Wisconsin Conservation Congress and city of Eau Claire, Wis. 9/23/99

Reynoldsburg Biologist Teaches ESA to Ohio Transportation Employees

Reynoldsburg Field Office
During Fiscal Year 1999, Buddy Fazio of the Service's Reynoldsburg field office taught Endangered Species Act section 7 consultation and recovery to more than 400 Ohio Department of Transportation (ODOT) employees during quarterly training sessions in Ohio. The employees are engineers, biologists, and decision makers employed by ODOT or its consultants to plan and implement development of transportation projects in Ohio. Emphasis on integrating early planning and coordination for endangered species needs into overall project planning will greatly reduce species/project conflicts in the long-term. Early dialog thus allows time to resolve any conflicting issues that arise, often avoiding impacts to endangered species and facilitating project completion altogether. This means early consultation on Federal candidate, threatened, and endangered species ensures smooth completion of projects while effectively conserving species. 9/27/99

Batting a Thousand on the Wayne National Forest of Ohio

Reynoldsburg Field Office
The Service's Reynoldsburg Field office is working with the U.S. Forest Service's Wayne National Forest to enhance Indiana bat recovery. Forest management practices beneficial to the Indiana bat are being integrated into the Wayne National Forest Management Plan and other Forest actions. The Indiana bat is being addressed early in the Wayne National Forest's Management Plan amendment process to ensure sufficient protection and recovery for the Indiana bat before, during, and after timber harvest. In a positive move, the Wayne National Forest invited a member of the Reynoldsburg Field Office to work on an Identification Team which identifies important endangered species management issues and practices on the forest. Partners include: Wayne National Forest, U.S. Forest Service. 9/28/99

Wisconsin Approves Statewide Habitat Conservation Plan for Karner Blue Butterfly

Ecological Services
Secretary of the Interior Bruce Babbitt joined Region 3 of the Fish and Wildlife Service at the Sandhill Wildlife Management Area in central Wisconsin Sept. 27, 1999, to announce approval of a Statewide Habitat Conservation Plan designed to protect the endangered Karner blue butterfly. The plan will help protect the butterfly while

allowing land use and land management activities to continue. Regional Director Bill Hartwig issued an incidental take permit to the Department of Natural Resources and 25 private partners, authorizing implementation of the Plan throughout Wisconsin. The Habitat Conservation Plan is the first of its kind in the nation. It includes a variety of activities such as forestry, right-of-way management, and habitat restoration that, when carried out, may incidentally take the endangered butterfly. The Karner blue butterfly is unique in its need to have disturbance to thrive. Long term survival of the populations on the landscape must include the very types of activities that involve some take of individual butterflies. The Plan has been developed to accomplish a goal of no net loss of available butterfly habitat over its 10-year implementation. The Plan also involves an innovative strategy to include private landowners in Wisconsin through a voluntary conservation effort. An extensive landowner contact program will be carried out by the DNR and HCP partners to demonstrate that the butterfly and land users can, indeed, co-exist in ways that benefit both. In addition to Secretary Babbitt and Regional Director Hartwig, the commemorating event featured endorsements by representatives of the Wisconsin DNR, forest industry, conservation organizations and private landowners. Interior Secretary Bruce Babbitt praised the effort as an example of the flexibility of the

Endangered Species Act and the value of developing partnerships to create innovative approaches across a broad landscape.

Partners include: Wisconsin Department Of Natural Resources, Alliant Energy-Wisconsin Power & Light Company; ANR Pipeline; Burnett County Forest; Clark County Forest; Consolidated Papers Inc; Eau Claire County Forest; Jackson County Forest; Johnson Timber Company; Juneau County Forest; Lakehead Pipeline; Monroe County Forest; Nekoosa Papers, Inc; Northern States Power Company; Northwestern Wisconsin Electric Company; Polk - Burnett Electric Cooperative; The Nature Conservancy; Thilmany Division - International Paper; Washburn County Forest; Wausau-Mosinee Paper Corporation; Wisconsin Gas Company; Wisconsin Public Service Corporation; Wisconsin River Power Company; Wisconsin Department Of Transportation; Wisconsin Departments Of Trade, Agriculture and Consumer Protection and Wood County Forest. 9/27/99

Settlement Proceedings for the Stiles Hydroelectric Project on the Lower Oconto River

Green Bay Field Office

The Green Bay Field Office together with several other stakeholders, has made substantial progress on formulating a Settlement Agreement with the Oconto Electric Cooperative for relicensing their hydroelectric (hydro) project on the Oconto River. The hydro project is located approximately 15 miles up-

stream from the river's confluence with the bay of Green Bay. Substantial benefits to fish, wildlife, and recreational resources are expected when the settlement agreement is completed, including improvement in project operations, improvement of approximately 15 miles of rainbow trout (steelhead) habitat, a plan to protect fish from entrainment and turbine mortality, a plan to improve land management on project lands, protection of federally-listed threatened and endangered species and their habitats, and improvement to recreational facilities. Partners include: Oconto Electric Cooperative, FWS, Wisconsin Department of Natural Resources, River Alliance of Wisconsin, Green Bay Trout Unlimited, Wisconsin Federation of Fly Fishers, Machickanee Flowage Advancement Association, Oconto County Economic Development Corporation and the Town of Stiles. 9/28/99

Ohio City, State Work With Service to Protect Threatened Northern Monkshood Plant

Reynoldsburg Field Office

A breakthrough has occurred which better protects the federally-threatened northern monkshood plant in Ohio! The City of Cuyahoga Falls, Ohio, and the Ohio Department of Transportation agreed to modify highway construction to divert destructive road salt outwash away from Ohio's largest population of federally-threatened northern monkshood plants. The Service's Reynoldsburg Field Office and

the Ohio Division of Natural Areas and Preserves have worked for six years to achieve this milestone in conservation of northern monkshood plants in Ohio. Diverting road salt outwash on an eight-lane Ohio highway away from Ohio's biggest population of northern monkshood plants is a recovery achievement critical to the continued existence of the monkshood population affected. Diversion of road salt outwash will allow the monkshood population to recover over time to its previous healthy population levels. Partners in the effort include Ohio Division of Natural Areas and Preserves; Summit County Metroparks; Ohio Department of Transportation; City of Cuyahoga Falls, Ohio, and Holden Arboretum. 9/28/99

Landowner Going to Bat for Endangered Indiana Bats

Reynoldsburg Field Office

The Reynoldsburg Field Office is working with a private landowner/businessman and the Ohio Division of Wildlife to protect and manage four species of bats in an underground mine, including the Federally endangered Indiana bat. The mine contains approximately 10,000 endangered Indiana bats and 15,000 other bats comprising three other bat species. The landowner allowed the Ohio Division of Wildlife to place large, protective bat gates on each of 12 entrances. The landowner is discussing a variety of other bat conservation options with the Service and the Ohio Division of Wildlife. 9/28/99

Endangered American Burying Beetles Return to Ohio!

Reynoldsburg Field Office

The Service's Reynoldsburg Field Office is working with agency and university partners to reintroduce the endangered American burying beetle to Ohio. The beetles were collected in Arkansas by the Oklahoma Biological Survey and shipped to Ohio just before release. So far, 70 pair of American burying beetles have been released into a State wildlife area during two subsequent years. Another release event will occur in Ohio during Fiscal Year 2000. Successful establishment of the American burying beetle in Ohio will mean the national recovery objective of establishing the beetle in three of four regions across the U.S. will be achieved. This achievement will lead to reclassification (upgrading) the status of the beetle from endangered to threatened, an important step closer to eventually removing the beetle from the endangered species list altogether. Partners in the reintroduction effort include the Ohio Division of Wildlife; Ohio State University Entomology Department and the Service's New England Ecological Services field office, Region 5. 9/28/99

East Lansing Field Office Documents Mercury Levels in Edible Fish Fillets From Seney NWR

East Lansing Field Office

The Service's East Lansing Field Office has quantified in a report the level of mercury in edible fillets from fish collected on the Seney National Wildlife Refuge. The study was based on

125 fish of 4 species collected from 12 refuge pools in 1996 and 1997. The results show that mercury in some northern pike and yellow perch fillets, both skin on and skin off, exceed State and/or Federal criteria for the protection of humans. The report recommends the Service issuing interim consumption advice for certain fish species on Seney NWR, submitting the data to the Michigan Department of Community Health for possible formal consumption advice, and initiating public outreach to inform and educate refuge visitors and sports fishermen on the advisory. An interim consumption advisory is consistent with the State of Michigan's 1989 special consumption advisory for mercury in fish for all inland lakes in the State. 9/30/99

Chicago Field Office Authors Recovery Plan For Eastern Prairie Fringed Orchid

Chicago Field Office

The Chicago Field Office submitted a final recovery plan for the eastern prairie fringed orchid (*Platanthera leucophaea*) to the Regional Office for review. This tall, graceful prairie plant has been extirpated from Missouri, Pennsylvania, New Jersey, Virginia, Oklahoma, and New York, but still occurs in Illinois, Iowa, Maine, Michigan, Ohio and Wisconsin and Canada. It has been extirpated from 70 percent of its former range. Recovery actions would involve protecting and restoring habitats that support the prairie orchid, as well as reintroducing the plants into areas where it once lived but has since been extirpated. The Service placed the eastern

prairie fringed orchid on the Endangered Species List in 1989. Only eight of the 59 U.S. populations are considered to have high viability, with potential for long term persistence, and only four of these are protected. 9/30/99

Service Interns Update Population Information on Hine's Emerald Dragonfly in Illinois

Chicago Field Office

Three biology students joined the Chicago Field Office for the summer to survey likely Hine's emerald dragonfly habitat for the presence of the dragonfly and to update population information for the known Hine's emerald dragonfly sites in Illinois. The interns confirmed the presence of the Hine's emeralds at sites where they had not been documented in several years, sometimes sitting on ladders in marshes to see over the cattails. Partners include: Illinois State Museum. 9/30/99

Surveyors Stalk Pollinators of Wisconsin's Eastern Prairie Fringed Orchid

Chicago Field Office

The Service funded two graduate students from the University of Wisconsin, Madison, to conduct surveys to identify the Wisconsin pollinators of the threatened eastern prairie fringed orchid. The survey identified a new species of hawkmoth pollinator for Wisconsin. The final study report will provide information on the pollinators' life history and larval food plants. This information will help us fulfill our Section 7 responsibilities in consulting with the Forest Service on potential impacts of the gypsy

moth control program on listed species, since the eastern prairie fringed orchid depends on hawkmoths for pollination. 9/30/99

Chicago, Green Bay Field Offices Studying Requirements For Hine's Emerald Dragonfly Habitat

Chicago Field Office

The Chicago Field Office, the Green Bay Field Office, and The Nature Conservancy are supporting research on the larval ecology and habitat requirements of the Hine's emerald dragonfly. This two-year study by the Illinois Natural History Survey has already revealed the importance of crayfish burrows in Hine's emerald dragonfly habitat. This work is identified as a priority one task in the draft recovery plan because there is currently not enough information about the larval requirements to guide restoration of potential Hine's emerald dragonfly habitat. This study on the larval habitat requirements of the endangered Hine's emerald dragonfly is providing clues to necessary habitat features that will guide efforts to locate additional habitat, or restore degraded habitat at sites near existing populations. Partners include: Illinois Natural History Survey, Ridges Sanctuary, Inc., Forest Preserve District of Will County, Illinois and The Nature Conservancy. 9/30/99

Kick-Off Meeting for Saginaw NRDA Trustee Working Group

East Lansing Field Office

Lisa Williams of the East Lansing Field Office organized and conducted the first meeting of the Saginaw River and Bay Natural Resource Damage Assessment Trustee Council Working Group on Sept. 30, 1999. At the meeting, representatives from the Service, the Michigan Department of Environmental Quality, the Michigan Attorney General's Office, and the Saginaw Chippewa Tribe began the planning process for the \$4 million in wetland restorations and access site development which will be funded by General Motors as a result of the NRDA settlement. Partners include: Michigan Department of Environmental Quality, Saginaw Chippewa Tribe and Michigan Attorney General's Office. 9/30/99

East Lansing Field Office and Partners Restore 112 Acres of Wetland Habitat During Fiscal Year 1999

East Lansing Field Office

The East Lansing Field Office had a productive year in the Partners for Fish and Wildlife Program, completing 38 wetland restoration projects totalling 112.3 acres of habitat. Three upland enhancement projects were also completed, affecting 22.6 acres. The partners involved with these projects included: Ducks Unlimited, Pheasants Forever, Michigan Department of Natural Resources, Michigan Department of Environmental Quality, Ingham Conservation District, Jackson County Soil and Water Conservation District, Shiawassee Conservation District, Kalamazoo Conservation District, Timberland R.C. & D. Area Council, Inc., Natural Resources Conservation Service and West Michigan Wetlands Foundation. 9/30/99